# THE REGION'S ECONOMY-1984

Southeastern Connecticut Regional Planning Agency

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# THE REGION'S ECONOMY, 1984 SOUTHEASTERN CONNECTICUT PLANNING REGION

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SOUTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY '139 Boswell Avenue, Norwich, Connecticut 06360

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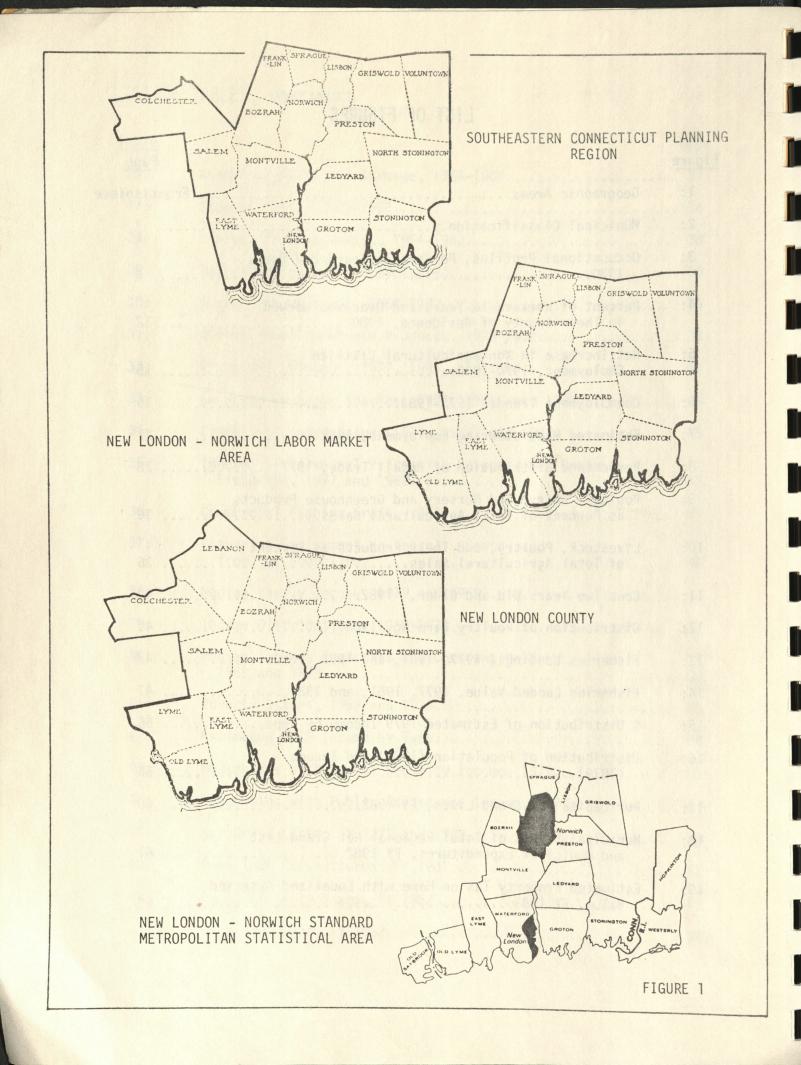
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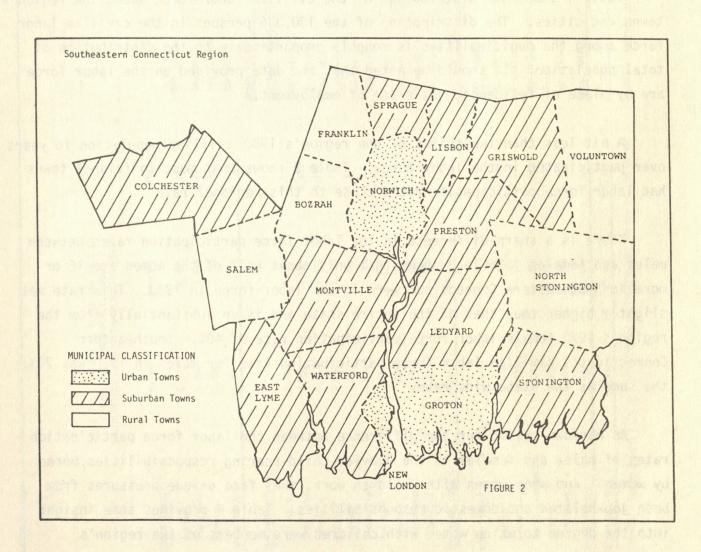
#### I. INTRODUCTION

This report is intended to serve several purposes. It will provide data and analysis useful in local and regional planning. It will fill a need of economic development agencies for basic information on the region. And it will provide information useful to people considering Southeastern Connecticut as a location for their businesses.

The study reports significant data relating to the region's economy and identifies trends. Where they can be identified, the strengths and weaknesses of the area's economy are discussed.

In subsequent sections of this report, data are reported for the South-eastern Connecticut Planning Region, the New London-Norwich Labor Market Area, New London County, and the New London-Norwich Standard Metropolitan Statistical Area. These are not coterminous, as can be seen from Figure 1. Some data gathered by the Connecticut Labor Department are available only for the Labor Market Area, and some census data are available only for the county or the SMSA.

In some cases, municipal data are presented in three broad groupings of the municipalities: urban, suburban, and rural. These are shown on Figure 2.



#### II. LABOR FORCE CHARACTERISTICS

The 1980 Census reported that of the region's population of 159,391 age 16 years or older, 113,163 were in the labor force. This is a labor force participation rate of 71%, compared to a rate of 65% for the entire State of Connecticut.

About 11% of the region's labor force consisted of military personnel. This involved nearly 12,800 persons residing throughout the region. However, 55% of these resided in Groton and 85% resided in the three-town grouping of Groton. New London and Ledyard.

Table 1 shows the distribution of the civilian labor force among the region's towns and cities. The distribution of the 100,386 persons in the civilian labor force among the municipalities is roughly proportionate to the distribution of total population. It should be noted that the data provided on the labor force are by place of residence, not place of employment.

A bit less than two-thirds of the region's 1980 civilian population 16 years and over participated in the labor force. Table 2 shows that most individual towns had labor force participation rates close to this regional rate.

There is a sharp difference in the labor force participation rates between males and females. Table 3 shows that only about half of the women age 16 or more in Southeastern Connecticut were in the labor force in 1980. This rate was slightly higher than that of the entire state and is up substantially from the region's 1970 female labor force participation rate of 40%. Southeastern Connecticut's civilian labor force participation rate for males in 1980 was 78%, the same as the state-wide rate.

An obvious reason for the difference between the labor force participation rates of males and females is the heavier child-rearing responsibilities borne by women. And when women with children work, they face unique pressures from both job-related and domestic responsibilities. Table 4 provides some insight into the degree to which women with children were members of the region's

TABLE 1: PERSONS 16 YEARS AND OVER IN CIVILIAN LABOR FORCE, 1980 SOUTHEASTERN CONNECTICUT PLANNING REGION

TABLE 2: PERSONS 16 YEARS AND OVER BY CIVILIAN LABOR FORCE STATUS, 1980 SOUTHEASTERN CONNECTICUT PLANNING REGION

							Labor Force as
ONNOT NEADIL	Males	Females	Total		otal 16 Years and Over	Labor Force	% of lotal
Groton	8.272	6.598	14,870	URBAN TOWNS:			
New London	6,599	5,632	12,231	Groton	23,763	14,870	62.6
Norwich	10,068	7,398	17,466	New London	20,664	12,231	59.5
URBAN TOTALS:	24.,939	19,628	44,567	Norwich	28,660	17,466	6.09
		40	000 m	URBAN TOTALS:	73,087	44,567	61.0
SUBURBAN TOWNS:				SUBURBAN TOWNS:			
Colchester	2,230	1,602	3,832	Colchester	5.625	3,832	68.1
East Lyme	4,028	2,667	6,695	East Lyme	10,275	6,695	65.2
Griswold	2,563	1,623	4,186	Griswold	6,604	4,186	63.4
Ledyard	3,350	2,486	5,836	Ledyard	8,684	5,836	67.2
Lisbon	943	675	1,618	Lisbon	2,354	1,618	68.7
Montville	4,548	3,185	7,733	Montville	11,612	7,733	9.99
Preston	1,283	737	2,020	Preston	3,633	2,020	55.7
Sprague	804	604	1,408	Sprague	2,193	1,408	64.2
Stonington	4,739	3,244	7,983	Stonington	12,668	7,983	63.0
Waterford	5,054	3,620	8,6/4	Waterford	13,999	8,674	62.0
SUBURBAN TOTALS:	29,542	20,443	49,985	SUBURBAN TOTALS:	77,647	49,985	64.4
RURAL TOWNS:				RURAL TOWNS:			
Bozrah	629	474	1,103	Bozrah	1,553	1,103	71.0
Franklin	479	377	928	Franklin	1,195	856	71.6
North Stonington	1,203	774	1,977	North Stonington	3,058	1,977	64.7
Salem	989	444	1,130	Salem	1,639	1,130	68.9
Voluntown	460	308	768	Voluntown	1,212	768	63.4
RURAL TOTALS:	3,457	2,377	5,834	RURAL TOTALS:	8,657	5,834	67.4
REGIONAL TOTALS:	57,938	42,448	100,386	REGIONAL TOTALS:	159,391	100,386	63.0
SOURCE: Summary Tape	Summary Tape File 3A, 1980 Census of Population, Bureau of the Census.	s of Population, Bu	ireau of the Census.	SOURCE: Summary Ta	Summary Tape File 3A, 1980 Census of Population, Bureau of the Census.	us of Population, Bur	eau of the Census.

TABLE 3: PERSONS 16 YEARS AND OVER BY SEX BY CIVILIAN LABOR FORCE STATUS, 1980 SOUTHEASTERN CONNECTICUT PLANNING REGION

TABLE 4: WOMEN\* WITH DEPENDENT CHILDREN IN THE CIVILIAN LABOR FORCE, 1980 SOUTHEASTERN CONNECTICUT PLANNING REGION

		Males	41	Females			2	men With De	Women With Dependent Children	Iren
	Total	% in Labor Force	Total	% in Labor Force		Total Women	Under	Under 6 Years	M1th 6-17	6-17 Years
URBAN TOWNS:						In Labor Force	No.	9-6	No.	8-8
Groton	10,278	80.5	13,485	48.9	URBAN TOWNS:					
New London	9,141	72.2	11,523	48.9	Groton	865,9	786	15.0	1,712	25.9
Norwich	13,256	75.8	15,404	48.0	New London	5,632	648	11.5	898	15.4
URBAN TOTALS:	32,675	76.3	40,412	48.6	Norwich	7,398	801	10.8	1,826	24.7
SUBURBAN TOWNS:			13		URBAN TOTALS:	19,628	2,436	12.4	4,406	22.4
					SUBLIRBAN TOWNS.					
Colchester	2,747	81.2	2,878	55.7						
East Lyme	4,915	82.0	5,360	49.8	Colchester	1,602	206	12.9	391	24.4
Griswold	3,216	79.7	3,388	47.9	East Lyme	2,667	158	5.9	925	34.7
Ledyard	3,901	85.9	4,783	52.0	Griswold	1,623	275	16.9	420	25.9
Lisbon	1,167	80.8	1,187	56.9	Ledyard	2,486	346	13.9	864	34.8
Montville	5,679	80.1	5,933	53.7	Lisbon	675	29	6.6	256	37.9
Preston	1,863	68.9	1,770	41.6	Montville	3,185	385	12.1	1,026	32.2
Sprague	1,038	77.5	1,151	52.5	Preston	737	20	8.9	213	28.9
Stonington	890,9	78.1	009'9	49.2	Sprague	604	- 29	11.11	169	28.0
Waterford	969,9	75.5	7,303	49.6	Stonington	3,244	298	9.2	836	25.8
SUBURBAN TOTALS:	37,290	79.2	40,353	50.7	Waterford	3,620	304	8.4	666	27.4
					SUBURBAN TOTALS:	20,443	2,156	10.5	6,093	29.8
KUKAL IUMNS:	141			0	RIIRAI TOWNS.					
Bozran	141	7.40	900	20.0						
Franklin	595	80.5	009	62.8	Bozrah	474	37	7.8	148	31.2
North Stonington	1,517	79.3	1,541	50.2	Franklin	377	29	17.8	103	27.3
Salem	808	84.9	831	53.4	North Stonington	774	73	9.4	234	30.2
Voluntown	620	74.2	265	52.0	Salem	444	49	11.0	116	26.1
RURAL TOTALS:	4,287	80.6	4,370	54.4	Voluntown	308	39	12.7	77	25.0
REGIONAL TOTALS: 7	74,252	78.0	85,135	49.9	RURAL TOTALS:	2,377	265	11.1	829	28.5
SOURCE: Summary Tap	e File 3	Summary Tabe File 3A, 1980 Census of Population.		Bureau of the Census.	REGIONAL TOTALS:	42,448	4.857	11.4	721 11	26.3
										60.00

\* 16 years and over.

TABLE 5: EMPLOYED PERSONS 16 YEARS AND OVER BY OCCUPATION, 1980 SOUTHEASTERN CONNECTICUT PLANNING REGION

	Managerial & Professional	Technical; Sales; Administrative Support	Service	Farming; Forestry; Fishing	Precision Production; Craft; Repair	Operators; Fabricators Laborers	Total
URBAN TOWNS:							
Groton	3,556	4,079	1,982	126	2,391	1,885	14,019
New London	2,353	3,090	2,215	149	1,535	1,984	11,326
Norwich	3,279	4,322	2,514	174	2,692	3,334	16,319
URBAN TOTALS:	9,188	11,491	6,711	449	6,618	7,203	41,660
SUBURBAN TOWNS:							
Colchester	783	1,121	357	113	577	739	3,690
East Lyme	2,196	1,753	805	35	875	703	6,367
Griswold	456	964	464	113	796	1,150	3,94
Ledyard	1,828	1,613	587	67	904	567	5,56
Lisbon	220	427	205	64	349	244	1,50
Montville	1,374	2,054	879	73	1,435	1,477	7,29
Preston	497	533	222	83	325	252	1,91
Sprague	229	442	101	22	272	364	1,43
Stonington	1,886	1,071	762	134	1,463	1,258	6,57
Waterford	2,221	2,355	1,172	93	1,277	1,284	8,40
SUBURBAN TOTALS:	11,690	12,333	5,554	797	8,273	8,038	46,68
RURAL TOWNS:			9				
Bozrah	202	292	120	52	205	191	1,06
Franklin	204	220	93	41	126	134	81
North Stonington	419	465	179	97	466	273	1,89
Salem	299	256	98	26	227	178	1,08
Voluntown	97	178	70	52	139	165	70
RURAL TOTALS:	1,221	1,411	560	268	1,163	941	5,56
REGIONAL TOTALS:	22,099	25,235	12,825	1,514	16,054	16,182	93,90

SOURCE: Summary Tape File 3A, 1980 Census of Population, Bureau of the Census.

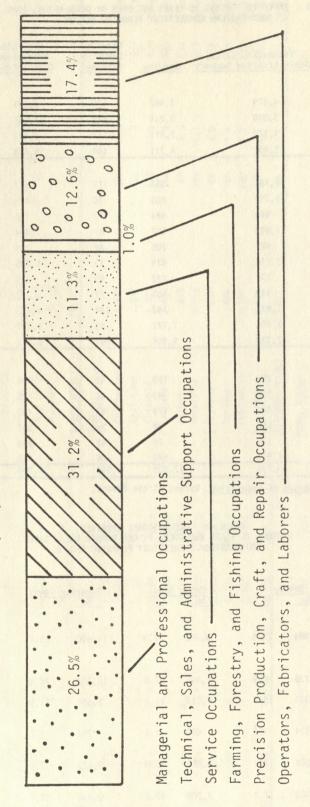
TABLE 6: OCCUPATIONAL PROFILES,
PERSONS 16 YEARS AND OVER, BY GEOGRAPHIC AREA, 1980
SOUTHEASTERN CONNECTICUT PLANNING REGION

	Reg	ion	Urban	Towns	Suburbai	n Towns	Pura 1	Towns
Occupations	No.	%	No.	2/2	No.	%	No.	% TOWIS
Managerial and Professional	22,099	23.5	9,188	22.0	11,690	25.1	1,221	21.9
Technical; Sales; Administrative Support	25,235	26.9	11 401	27.6	10 000			
			11,491	27.6	12,333	26.4	1,411	25.4
Service	12,825	13.7	6,711	16.1	5,554	11.9	560	10.1
Farming; Forestry; Fishing	1,514	1.6	449	1.1	797	1.7	268	4.8
Precision Production; Craft; Repair	16,054	17.1	6,618	15.9	8,273	17.7	1,163	20.9
Operators; Fabricators; Laborers	16,182	17.2	7,203	17.3	8,038	17.2	941	16.9
TOTAL:	93,909	100.0	41,660	100.0	46,685	100.0	5,564	100.0

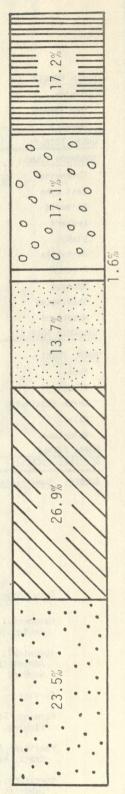
SOURCE: Summary Tape File 3A, 1980 Census of Population, Bureau of the Census.

OCCUPATIONAL PROFILES, PERSONS 16 YEARS AND OVER, 1980

STATE OF CONNECTICUT TOTAL: 1,482,562



SOUTHEASTERN CONNECTICUT PLANNING REGION TOTAL: 93,909



civilian labor force in 1980. Of the 42,448 women in the labor force, nearly four out of ten had dependent children under age seventeen. And more than one in ten had children under six years. The female labor force in the suburban and rural towns, as groups, had a somewhat higher representation of women with dependent children than did the urban towns. However, the differences are not substantial and most likely reflect the larger family size typical of the suburban and rural towns.

One-third of all respondents in a survey of women in Southeastern Connecticut in 1979\* indicated a need for childcare services if they are to work. And more than 90% of the respondents in the 18-40 years of age group cited such a need.

Tables 5 and 6 review the occupational skills of employed persons age 16 or more in 1980. These data are by place of residence rather than by place of employment. The profile of Southeastern Connecticut's employed labor force differs slightly from that of the state as a whole. (See Figure 3.) The region had a smaller percentage of its workers in the Managerial, Professional, Technical, Sales, and Administrative Support categories than did the state. Collectively, these occupational groups accounted for half of the region's employed population, while they represented 58% of the state's workers. On the other hand, the region had a higher percentage of its workforce (17.1%) in Precision Production, Craft, and Repair occupations than did Connecticut (12.6%). This undoubtedly reflects the influence of General Dynamics/Electric Boat. Another notable difference was the region's higher percentage (13.7%) in Service Occupations compared with 11.3% for the state as a whole. Here, the region's tourism industry is the probable influence.

<sup>\*</sup> A Survey On the Employability of Women In Southeastern Connecticut, SCRPA, 1980.

#### III. EMPLOYMENT PATTERNS

A further approach to analyzing the region's employment structure is presented in Table 7. Again, these figures are by place of residence rather than place of employment. This table shows that roughly a third of the region's employed residents worked in Manufacturing, which makes this by far the largest employment category. Professional and Related Services was the second largest employer at about 20% of the total. Wholesale and Retail Trade accounted for about 18%, with nearly all of this attributable to retail employment. No other industry group provided as much as 5% of the region's civilian employment in 1980.

Similar information, but by place of work rather than place of residence, is shown in Table 8. This information, provided by the Connecticut Labor Department, gives a profile of the non-agricultural civilian employment within the New London-Norwich Labor Market Area in June of 1983.

Fully 35% of the total employment was in Manufacturing, with more than 25% in Metalic Manufacturing industries. In this case, the primary Metalic Manufacturing employer is the General Dynamics/Electric Boat plant in Groton, which builds nuclear submarines. In contrast, less than 30% of Connecticut's nonagricultural civilian employment was in manufacturing. From 1972-83, Manufacturing employment within the New London-Norwich Labor Market Area increased by about 8,000 jobs, and in both years it accounted for about 35% of total nonagricultural civilian employment.

Other areas of significant employment within the Labor Market Area in June of 1983 included: Service (17.6%), Retail Taade (16.5%), and Government (16.4%). These three categories accounted for more than three-quarters of the LMA's non-manufacturing employment.

TABLE 7: EMPLOYED PERSONS 16 YEARS AND OVER BY INDUSTRY, 1980 SOUTHEASTERN CONNECTICUT PLANNING REGION

Total		14.019	11.326	16 315	A1 660	11,000	3,690	6,367	3,943	5,569	1,509	7,292	1,912	1,370	7,520	8,322	47.494		1,062	818	1,899	1,084	702	5.565	94,719	STREET, STREET
Public Administration		591	618	869	2 078	0,019	180	316	105	244	66	327	151	41	231	489	2.183		19	26	88	70	22	308	4,569	ATMINISTRATION OF THE PROPERTY
Professional and Related Services		2.774	3,037	3,924	9 735	A COLUMN TO A COLU	639	1,533	290	1,228	273	1,247	480	232	1,267	1,954	9,443	STATE OF STA	194	131	314	230	120	686	20,167	CA TON COMPANY OF STATE OF STREET STATE OF STATE
Personal, Intertainment and Recreational Services		395	199	583	1.539	THE R. P. LEWIS CO., LANSING STREET, SPICE OF PERSONS AND PROPERTY.	65	240	147	106	59	500	43	29	234	287	1,389	THE REAL PROPERTY OF THE PROPE	23	11	95	59	14	139	3,067	
Business and Repair Services		615	273	433	1,321	edanterrations qualifications and a section transfer and a section and a	183	201	137	566	38	186	80	55	319	224	1,689		30	20	107	34	28	219	3,229	THE RESIDENCE AND ADDRESS OF THE PARTY OF TH
Finance, Insurance, Real Estate		517	322	634	1,473		346	251	145	292	19	310	100	108	188	592	2,037		27	44	82	35	17	205	3,715	Commence of the control of the contr
Retail		2,456	1,957	2,256	6,669	PR DING	520	1,062	411	1,061	193	1,130	203	174	1,163	1,524	7,441		152	144	161	156	89	1117	14,821	
Wholesale Trade		220	216	487	923	a	16	143	911	94	83	220	34	29	75	164	1,052		30	34	17	28	18	127	2,102	
Communications & Public Utilities		298	236	532	1,066		107	308	51	91	17 6	260	39	12	175	266	1,326		27	24	33	20	10	144	2,536	
Transportation		382	303	357	1,042		192	191	149	96	48	207	48	62	208	272	1,473		48	37	12	35	35	167	2,682	he Census.
Manufacturing		5,129	3,376	5,378	13,883		1,123	1,654	1,730	1,863	491	2,817	512	574	3,093	2,439	16,296		309	206	815	305	267	1,902	32,081	tion, Bureau of t
Construction		537	370	652	1,559		137	400	250	198	121	589	122	30	438	367	2,362		98	55	89	78	33	320	4,241	Summary Tape File 3A, 1980 Census of Population, Bureau of the Census.
Agriculture, Forestry, Fisheries, Mining		105	57	210	372		107	89	109	09	99	80	100	24	129	70	803		69	50	116	34	65	334	1,509	e File 3A, 198
	URBAN TOWNS:	Groton	New London	Norwich	URBAN TOTALS:	SUBURBAN TOWNS:	Colchester	East Lyme	Griswold	Ledyard	Lisbon	Montville	Preston	Sprague	Stonington	Waterford	SUBURBAN TOTALS:	RURAL TOWNS:	Bozrah	Franklin	North Stonington	Salem	Voluntown	RURAL TOTALS:		SOURCE: Summary Tape

Total 15,155 19,412 11,294 45,861 3,517 5,898 5,919 1,487 6,993 858 3,461 1,247 6,641 7,841 44,862 Work Outside New London County 1,225 3,039 365 239 611 713 470 488 137 201 1,172 371 6,017 TABLE 9: WORKERS 16 YEARS AND OVER BY PLACE OF WORK, 1980\* SOUTHEASTERN CONNECTICUT PLANNING REGION Work Outside Municipality of Residence But in New London County 4,721 5,409 13,994 3,550 1,888 4,723 1,172 5,324 1,457 798 2,877 5,572 200 503 Work In Municipality Of Residence 5,962 8,521 28,828 1,635 1,103 831 1,181 264 248 2,592 1,898 10,894 163 SUBURBAN TOTALS: SUBURBAN TOWNS: JRBAN TOTALS: New London URBAN TOWNS: Colchester Stonington East Lyme Montville RURAL TOWNS: Griswold Waterford Norwich Ledyard Franklin Groton Preston Sprague Lisbon Bozrah TABLE 8: NON-AGRICULTURAL CIVILIAN EMPLOYMENT CHARACTERISTICS, JUNE 1983 % of Total 35.0 25.7 9.3 65.0 5.6 2.0 1.9 19.1 5.6 16.5 17.6 16.4 4.6 11.8 100.0 NEW LONDON-NORWICH LABOR MARKET AREA \* Excludes workers idled due to labor-management disputes. Employment 33,980\* 24,920\* 090'6 5,420 1,820 63,030 1,930 18,560 2,560 16,000 2,300 17,060 15,940 \*010,76 4,430 11,510 Communications and Utilities Finance, Insurance, Real Estate Local and State Non-Manufacturing Transportation Construction Manufacturing Non-metalic Wholesale TOTAL: Government Industry Federal Retail Metalic Service Trade

SOURCE: Summary Tape File 3A, 1980 Census of Population, Bureau of the Census. \* Excludes 9,040 workers not reporting this information.

REGIONAL TOTALS:

RURAL TOTALS:

Voluntown

Salem

1,796

1,027

694

814

148 151 284 122 835 9,891

1,360

285 54 147 751 40,473

North Stonington

SOURCE: Connecticut Labor Department, Employment Security Division.

689 425 3,686 45,631

5,272

95,995

More than four out of ten workers in the region reporting in the 1980 Census worked in their towns of residence. This was slightly higher than the average for the state as a whole. Among the region's eighteen municipalities, there was considerable variation in the proportion of reporting workers who worked in the same town in which they resided. This relationship was roughly dependent on the amount of employment available in the town of residence. Groton, Norwich and New London, which have the greatest concentration of jobs in Southeastern Connecticut, had the greatest percentage of their resident workers employed within their borders. In the rural towns, with substantially more limited job opportunities, only relatively small percentages of the work force found jobs within their town of residence. Overall, in 1980, Southeastern Connecticut had 55-60,000 workers commuting to jobs beyond the towns in which they lived.

Examination of Table 9 and Figure 4 shows that by far the bulk of this commuting is to jobs within New London County. Nearly nine out of ten of the workers reporting in the 1980 Census of Southeastern Connecticut towns worked in New London County. For Connecticut as a whole, nearly 83% of reporting workers had jobs in their county of residence.

The variation among the region's municipalities in the percentage of their workers employed within New London County is, with two exceptions, quite narrow. (See Figure 4.) The exceptions are Salem and Colchester, both of which have attracted residents who commute to jobs in the Hartford area via the Route 2 expressway. Overall, the 1980 Census indicates that about 10,000 workers commute out of Southeastern Connecticut to jobs in other counties.

One reason for a complex commuting pattern in Southeastern Connecticut is the fact that employment opportunities are not distributed in proportion to the population of each town. Table 10 shows that nearly three-quarters of the 94,000 non-agricultural civilian jobs available in the region in 1980 were concentrated in the three urban communities of Groton, New London, and Norwich. These, collectively, housed 44% of the region's civilian labor force. In contrast, the ten suburban towns together provided slightly more than one-quarter of the region's civilian employment, but their population included half of the region's civilian labor force. The five rural towns had only modest percentages of the region's employment and labor force.

PERCENT OF WORKERS 16 YEARS AND OVER WHO WORKED IN THEIR COUNTY OF RESIDENCE, 1980\*

Southeastern Connecticut Planning Region

Waterford	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
New London	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Groton	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Ledyard	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Montville	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Preston	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Norwich	%6.19 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
North Stonington	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
SOUTHEASTERN REGION	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
East Lyme	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Griswold	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Bozrah	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Lisbon	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Sprague	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Stonington	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Voluntown	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Franklin	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Salem	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Colchester	XXXXXXXXXXXXXXXX 47.1%

\* Excludes those not reporting.

Par n	TABLE 10: NON-AGRICUL' SOUTHEASTER	CIVILIAN LABOR TURAL CIVILIAN RN CONNECTICUT	TABLEJO: CIVILIAN LABOR FORCE AND TOTAL NON-AGRICULTURAL CIVILIAN EMPLOYMENT, 1980 SOUTHEASTERN CONNECTICUT PLANNING REGION	
O SO				
A Pop Pop ed	Labor	% 0f	+ noming range	% 05
ed .	LOLCE	10141	cmproyment	IOTAL
URBAN TOWNS:				
Groton	14,870	14.8	31,550	33.7
New London	12,231	12.2	17,600	18.8
Norwich	17,466	17.4	17,610	18.8
URBAN TOTALS:	44,567	44.4	66,760	71.3
SUBURBAN TOWNS:				orto Su
Colchester	3,832	3.8	1,700	1.8
East Lyme	6,695	6.7	2,890	3.1
Griswold	4,186	4.2	2,360	2.5
Ledyard	5,836	5.8	1,480	1.6
Lisbon	1,618	1.6	230	0.2
Nontville	7,733	7.7	3,100	3.3
Preston	2,020	2.0	1,340	1.4
Sprague	1,408	1.4	940	1.0
Stonington	7,983	8.0	5,390	5.8
Waterford	8,674	8.6	5,720	6.1
SUBURBAN TOTALS:	49,985	49.8	25,150	26.8
RURAL TOWNS:				16) J
Bozrah	1,103	1.1	350	0.4
Franklin	928	0.8	270	0.3
North Stonington	1,977	2.0	850	6.0
Salem	1,130	1.1	100	0.1
Voluntown	768	0.8	160	0.2
RURAL TOTALS:	5,834	5.8	1,730	1.9
REGIONAL TOTALS:	100,386	100.0	93,640	100.0

SOURCES: Summary Tape File 3A, 1980 Census of Population, Bureau of the Census. Connecticut Labor Department, Office of Research and Information.

FIGURE 4

This relative distribution of employment within the region did not change significantly over the decade of the 1970s. The urban towns had 72% of the region's non-agricultural civilian employment in 1970 and 71% in 1980. The suburban towns' share of this employment was 27% in both 1970 and 1980. Southeastern Connecticut's rural towns, as a group, increased their relative share of the region's non-agricultural civilian employment slightly from 1% in 1970 to 2% in 1980.

In addition to its civilian non-agricultural employment, about 15,350 military personnel were based in the region. These included 13,950 Navy officers and enlisted men, 494 Coast Guard officers and enlisted men and about 900 cadets at the U.S. Coast Guard Academy. All of these were employed in either Groton or New London.

If the civilian non-agricultural employment and the military employment are combined, the region's total employment in 1980 was about 109,000. Nearly three-quarters of this was located in the three urban towns of Groton, New London and Norwich.

The 1980 Census returns indicate that about 94,000 Southeastern Connecticut residents worked within the region. Subtracting this from the 109,000 identified jobs available in the region at that time provides an estimate of about 15,000 workers commuting from beyond this region to jobs within its borders. This contrasts with approximately 10,000 Southeastern Connecticut residents whom the 1980 Census identified as commuting to jobs outside the Southeastern Connecticut Planning Region. From the data available, it is clear that the Southeastern Connecticut Planning Region is a net importer of labor.\*

Table 11 and Figure 5 present data on changes in the region's non-agricultural civilian employment from 1970-80. Overall, the region added nearly 20,000 jobs during this period. More than two-thirds of these were located in the urban towns of Groton, New London, and Norwich, with Groton accounting for nearly half of the total regional increase. Figure 5 shows graphically the net increases in non-agricultural civilian employment among the region's towns. Besides Groton, employment increased significantly in Norwich, Waterford, and

<sup>\*</sup> For further details on worker commuting see: A Summary of Transportation Data From The 1980 Census of Population and Housing, SCRPA, 1983, and the Addendum to this report published in 1984.

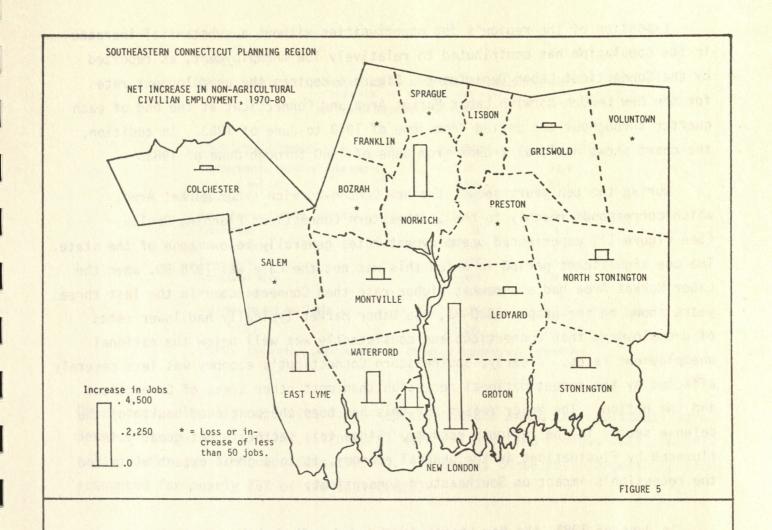
TABLE 11: TOTAL NON-AGRICULTURAL CIVILIAN EMPLOYMENT, 1970 AND 1980
SOUTHEASTERN CONNECTICUT PLANNING REGION

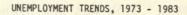
	Employment 1970	Employment 1980	% Change 1970-80
URBAN TOWNS:		nvotome etal V	
Groton	22,560	31,550	+39.8
New London	16,310	17,600	+ 7.9
Norwich	14,100	17,610	+24.9
URBAN TOTALS:	52,970	66,760	+26.0
SUBURBAN TOWNS:		ne ne ne de la col	
Colchester	1,520	1,700	+11.8
East Lyme	1,620	2,890	+78.4
Griswold	2,130	2,360	+10.8
Ledyard	1,050	1,480	+41.0
Lisbon	200	230	+15.0
Montville	2,390	3,100	+29.7
Preston	1,610	1,340	-16.8
Sprague	1,230	940	-23.6
Stonington	4,700	5,390	+14.7
Waterford	3,410	5,720	+67.7
SUBURBAN TOTALS:	19,860	25,150	+26.6
RURAL TOWNS:			
Bozrah	310	350	+12.9
Franklin	250	270	+ 8.0
North Stonington	270	850	+214.8
Salem	90	100	+11.1
Voluntown	140	160	+14.3
RURAL TOTALS:	1,060	1,730	+63.2
REGIONAL TOTALS:	73,890	93,640	+26.7

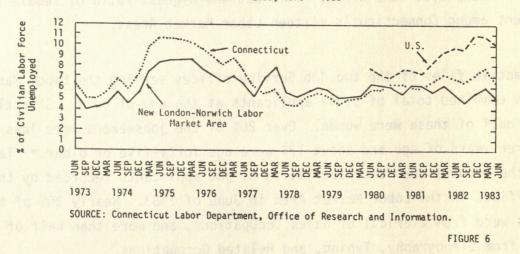
SOURCE: Connecticut Labor Department, Office of Research and Information.

East Lyme. Among the rural towns, North Stonington was the big gainer, increasing its employment by 580 jobs. This was a relative increase of 215%, by far the highest rate of any of the region's towns.

It is noteworthy that the rate of increase in the total non-agricultural civilian jobs available in the region from 1970 to 1980 was more than ten times that of the population growth rate: 26.7% to 2.4%. This disparity is explained by three factors. First, about nine out of ten of the region's resident workers in 1980 were employed within New London County, compared with about eight out of ten in 1970. Second, the participation rate of women 16 years of age or older in the region's labor force increased dramatically from 40% in 1970 to 50% in 1980. This alone added over 12,000 potential workers to the region's labor force. Finally, the region still attracts large numbers of commuting workers who reside outside Southeastern Connecticut.







Expansion of the region's job opportunities without a substantial increase in its population has contributed to relatively low unemployment, as reported by the Connecticut Labor Department. Figure 6 depicts the unemployment rates for the New London-Norwich Labor Market Area and Connecticut at the end of each quarter throughout the period from June of 1973 to June of 1983. In addition, the chart shows national trends from June of 1980 through June of 1983.

During the ten years shown, the New London-Norwich Labor Market Area, which corresponds roughly to the Southeastern Connecticut Planning Region (See Figure 1), experienced unemployment rates generally below those of the state. The one significant period in which this was not the case was 1978-80, when the Labor Market Area had a somewhat higher rate than Connecticut. In the last three years shown on the graph, 1980-83, the Labor Market typically had lower rates of unemployment than Connecticut and consistently was well below the national unemployment rates. Clearly, Southeastern Connecticut's economy was less severely affected by the recent national recession than most other areas of Connecticut and the nation. The major reason for this has been the continued health of the defense sector in the region's economy. Since this sector is not greatly influenced by fluctuations in the general economy, it to a great extent minimized the recession's impact on Southeastern Connecticut.

In June of 1983, the New London-Norwich Labor Market Area had a reported unemployment rate of 5.1%, with an estimated 5,800 workers unemployed. The state and national unemployment rates at this time were 6.4% and 10.2%.\* Just about half of the unemployed were women. This was the highest ratio of female to male unemployment among Connecticut's sixteen Labor Market Areas.

The active files of the two Job Service offices serving the Labor Market Area had a combined total of 9,344 applicants at the end of June. Slightly more than half of these were women. Over 20% of the jobseekers were less than twenty-three years of age and about 13% were age forty-five or older.\* Table 12 shows the occupational characteristics of job applicants recorded by the Job Service offices in the Labor Market Area in June of 1983. Nearly 30% of the applicants were from Clerical or Sales Occupations, and more than half of this group was from Stenography, Typing, and Related Occupations.

<sup>\*</sup> New London-Norwich Quarterly Labor Market Review, Connecticut Labor Department, July, 1983.

TABLE 12: CHARACTERISTICS OF JOBSEEKERS REGISTERED WITH THE CONNECTICUT JOB SERVICE, JUNE 1983

NEW LONDON-NORWICH LABOR MARKET AREA

Occupational Category	Applicants	% of Total
Professional, Technical, Managerial	1,070	13.9
Clerical and Sales	2,285	29.7
Service	1,237	16.1
Agriculture, Fishery, Forestry	430	5.6
Processing	76	1.0
Machine Trades	387	5.0
Bench Work	419	5.5
Structural Work	1,126	14.6
Miscellaneous	579	7.5
Information Not Available	86	1.1
TOTAL:	7,695	100.0

SOURCE: Connecticut Labor Department, Office of Research and Information.

Other occupational groups with large representations among the applicants were: Service Occupations (16.1%), Structural Work (14.6%), and Professional, Technical, and Managerial Occupations (13.9%). Together, these four largest groupings accounted for nearly 75% of the applicants.

#### IV. ECONOMIC SECTOR ANALYSIS

In this chapter, we analyze several of the more important sectors of the region's economy in greater detail than was possible in the overview of labor force characteristics and employment patterns presented thus far in this report. Two of those sectors are very closely related, namely, manufacturing and defense activities. The region's largest civilian manufacturing firm is a defense contractor, the Electric Boat Division of General Dynamics Corportation, which builds submarines for the U.S. Navy. The work of this firm is very closely related to that of other defense facilities owned and operated by the Federal Government. These include the U.S. Naval Submarine Base in Groton, and the U.S. Naval Underwater Systems Center in New London. It is safe to say that at the present time the region's economic base is largely provided by defense activity, both civilian and military.

Retail trade, the next subject to be discussed, is supported in large part both by people employed in manufacturing and by military personnel. Tourism, agriculture and fishing, the final subjects to be described, are all comparatively small in their economic impact but they are important for several reasons. First, they all provide an opportunity for diversification from heavy manufacturing and defense, and they provide opportunities to take advantage of the region's resources, both natural and man-made.

#### MANUFACTURING EMPLOYMENT

At the close of the 19th Century, nearly twenty out of every 100 residents in the State of Connecticut were employed in manufacturing, and manufacturing workers made up 44 percent of the State's labor force. From World War II until the early 1970's, in the state and region the trend in manufacturing employment as a percentage of the labor force was downwards. But inthe past ten years in the region, it has been stable. According to the 1960 U.S. Census, 39% of the region's labor force was employed in manufacturing. In 1970, the comparable figure was 34% and in 1980, it was also 34%. It should be noted that manufacturing employs more workers than any other segment of the region's economy.

The census data described above give information on numbers of workers who reside in the region regardless of their place of employment. Table 13 below presents data from the Connecticut State Labor Department concerning employment in the region regardless of the workers' places of residence. This table indicates the same trend as do the census data described above. There was almost no change in the percentage of manufacturing employment from 1972 to 1983.

TABLE 13: TOTAL NON-AGRICULTURAL CIVILIAN EMPLOYMENT SOUTHEASTERN CONNECTICUT PLANNING REGION

Date, June Of:	Total Non-Agricultural Employment	Total Manufacturing Employment	Manufacturing As A % Of Total Employment				
1947	38,980	17,440	44.7				
1960	56,690	25,730	45.4				
1963	63,790	31,420	49.3				
1972	75,120	26,120	34.8				
1983*	97,910+	33,980+	34.7				

<sup>\* 1983</sup> data is for the New London-Norwich Labor Market Area.

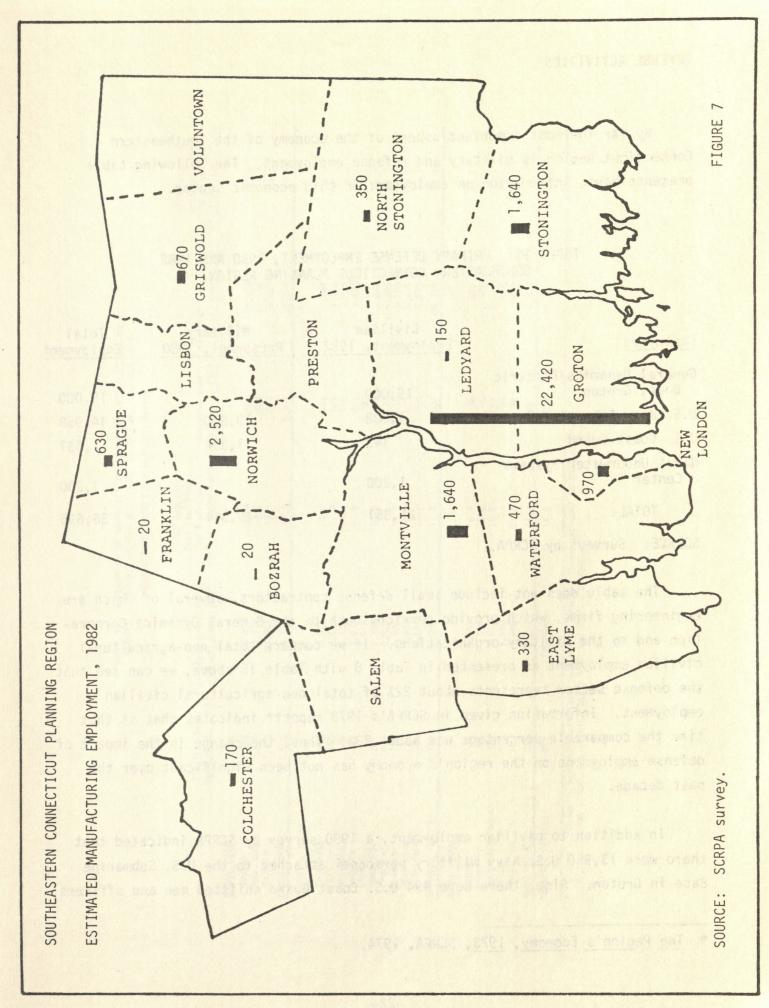
Table 14 reports the results of a survey of manufacturing employment conducted by SCRPA in 1982. The table lists the major manufacturing firms and the number of employees at each. This table, and Figure 7, which illustrates the town totals taken from the table, present a very good overview of the amount and geographic distribution of manufacturing employment in the region. While it is true that the survey was not able to cover all employers, the regional total of 32,000 manufacturing employees is only about 6 percent less than the figure of 33,980 manufacturing employees in 1983 which is shown in Table 13. Thus, Figure 7 provides a reasonably accurate picture. The figure shows the dominance of the Town of Groton in manufacturing activity. Aside from Groton, the figure also shows that manufacturing is fairly well concentrated in the urban and suburban towns. The only rural town that has significant numbers of manufacturing employees is North Stonington.

<sup>+</sup> Excludes workers idled due to labor-management disputes.

SOURCE: Data supplied by the Connecticut State Department of Labor.

#### TABLE 14: ESTIMATED DISTRIBUTION OF MANUFACTURING EMPLOYMENT, 1982 SOUTHEASTERN CONNECTICUT PLANNING REGION

GROTON:			Number of Employ
TO THE PROPERTY OF THE PERSON NAMED IN CO.	JASOTYENDO WOOD!	LEDYARD:	O. Emp10
Pfizer, Inc Arwood Corporation	3,000	Dow Chemical-USA Eastern Division	150
Electric Boat/General Dynamics	350	TOTAL:	150
Hillery, HR, Company	19,000	130 Chicken 201 Chicken Sept 18 change	
		MONTULLE.	
TOTAL:	22,420	MONTVILLE:	
NEW LONDON:		Connecticut Paperboard Corporation	60
		United Nuclear Corporation	1,230
Hendel Manufacturing Division	80	Robertson Paperbox Company	350
Thames Shipyard & Repair Company Thames Valley Stell Corporation	50	TOTAL:	1,640
Shefield Tube Corporation	220		
Day Publishing Company	240 260	SPRAGUE:	
New London Store Fixture Company	10	Amstar Corporation	180
Mafro Products Corporation	100	Federal Paperboard Company, Inc.	360
Crown Manufacturing	10	Chambers, MS, Son, Inc.	90
TOTAL		TOTAL:	630
The state of the s	970		
NORWICH:		STONINGTON:	
Jones Apparel Group	067,25	Acme Wire Products Company, Inc.	00
The Norwich Bulletin	330	Davis Standard Division	80
General Dynamics	150	Charbert Narrow Fabrics Corporation	290
Ortronics Corporation	370	Fox, M.J., Inc.	10
Atlantic Carton Corportation	100	Yardney Electric Corporation	300
Craig Labs/Masti Kure Products	70	Harris Corporation	940
Hale Manufacturing Company	150 150	TOTAL:	
Ohio Rubber Company	100	TOTAL.	1,640
Ryan Company	20	WATERFORD:	
Turner/Stanton Company	10		
Helikon of Connecticut	370	Bureau of Business Practice	360
King-Seeley Thermos Company	700	Jayfro Corporation	110
TOTAL:	3,520	TOTAL:	470
BAN TOTAL:	25,910	SUBURBAN TOTAL:	5,700
	25,510		0,,00
BURBAN TOWNS:		RURAL TOWNS:	
COLCHESTER:		BOZRAH:	
Coastal Steel Corporation	10	Gilman Brothers Company	0.0
S and S Arts and Crafts	160		20
TOTAL:	170	TOTAL:	20
	170	FRANKLIN:	
EAST LYME:			
Hermitage Hospital Products	100	K/L Feed Mill Corporation	20
Whiton Machine Division	190	TOTAL:	20
	140		13160169
TOTAL:	330	NORTH STONINGTON:	
GRISWOLD:		Posi-Seal International	350
		TOTAL:	350
Lisbon Textile Prints	40	RURAL TOTAL:	
Finley Screw Machine Products	10		390
Triangle PWC, Inc.	320	REGIONAL TOTAL:	32,000
Wyre-Wynd, Inc.	300	FROM SUPER USE TO SUPER TO SUPER THE SUPER USE	
TOTAL:	670		



By far the most important aspect of the economy of the Southeastern Connecticut Region is military and defense employment. The following table presents basic information on employment in this economic sector.

TABLE 15: PRIMARY DEFENSE EMPLOYMENT, 1980 AND 1982 SOUTHEASTERN CONNECTICUT PLANNING REGION

ary Total , 1980 Employment
19,000 0 14,958 4 1,537
1,200 4 36,695

SOURCE: Surveys by SCRPA.

The table does not include small defense contractors, several of which are engineering firms, which provide services both to the General Dynamics Corporation and to the military organizations. If we compare total non-agricultural civilian employment as presented in Table 8 with Table 15 above, we can see that the defense sector represents about 22% of total non-agricultural civilian employment. Information given in SCRPA's 1973 report\* indicates that at that time the comparable percentage was about 23%. Thus, the change in the impact of defense employment on the region's economy has not been significant over the past decade.

In addition to civilian employment, a 1980 survey by SCRPA indicated that there were 13,950 U.S. Navy military personnel attached to the U.S. Submarine Base in Groton. Also, there were 494 U.S. Coast Guard enlisted men and officers

<sup>\*</sup> The Region's Economy, 1973, SCRPA, 1974.

TABLE 16: EMPLOYMENT OF SOUTHEASTERN CONNECTICUT RESIDENTS AT THE GENERAL DYNAMICS/ELECTRIC BOAT PLANT IN GROTON, 1983 AND 1973 SOUTHEASTERN CONNECTICUT PLANNING REGION

1973 Electric Boat Employment As % of 1970 Civilian Labor Force	22.9 12.7 8.5	26.6 6.6 6.6 6.6 7.7 1.7 14.7 14.7 14.7	4.2 3.1 19.1 2.6 14.1 10.3
Civilian Labor Force 16 and Over, 1970	10,896 11,498 16,421	2,564 4,145 3,065 3,666 1,075 5,859 1,382 1,50 6,559 6,559	898 582 1,349 585 697 4,109
Electric Boat Employment, 1973	2,496 1,459 1,390 5,345	106 571 571 199 896 861 24 111 623 1,008	38 18 258 15 98 427 10,274
1983 Electric Boat Employment As % of 1980 Civilian Labor Force	23.8 16.0 12.3 17.1	5.6 11.3 13.6 19.4 16.2 10.2	6.4 6.2 19.2 21.8 11.5
Civilian Labor Force 16 and Over, 1980	14,870 12,231 17,466 44,567	3,832 6,695 4,186 4,186 1,618 7,733 2,020 1,408 7,983 8,674 49,985	1,103 856 1,977 1,130 768 5,834
Electric Boat Employment, 1983	3,539 1,951 2,148 7,638	216 756 568 1,133 1,251 1,251 170 730 886 5,710	71 53 378 * 168 670 14,018
nertical	Groton Groton New London Norwich URBAN TOTALS:	SUBURBAN TOWNS: Colchester East Lyme Griswold Ledyard Lisbon Montville Preston Sprague Stonington Waterford SUBURBAN TOTALS:	RURAL TOWNS:  Bozrah Franklin North Stonington Salem Voluntown RURAL TOTALS: REGIONAL TOTALS:

\* Lisbon included in Griswold; Preston included in Norwich; Salem included in Colchester. SOURCES: General Dynamics/Electric Boat; 1980 and 1970 U.S. Census. at the Coast Guard Academy in New London plus about 900 cadets. These figures give a grand total for military personnel residing in the Labor Market Area of 15,344. These people, together with their families, thus have an important impact on the economy of the area, especially on retail trade and on the housing market.

Altogether, the primary defense employment identified in Table 15 above accounted for about one-third of the region's total employment. Secondary defense employers would raise the defense-dependence ratio even higher. In addition to employment directly within the defense sector, a significant number of jobs in the service sector of Southeastern Connecticut's economy depend on expenditures generated by the defense activities and their employees. While hard numbers to define this situation do not exist, we can reasonably estimate that more than half the region's total employment is directly or indirectly dependent on defense activities.

Table 16 reviews Electric Boat employment by town of residence, for the towns of the region. This information is presented for 1973 and 1983. For comparison purposes, the totals for the civilian labor force within those towns for 1970 and 1980 are also given. These latter data are also by town of residence. Not only does this table demonstrate the economic impact of Electric Boat on the region, but the percentages given show that this impact has not changed significantly over the past decade.

It is also instructive to compare the numbers of Electric Boat employees residing in the region with total Electric Boat employment. In December, 1983, Electric Boat's total employment at its Groton facilities stood at about 20,000. Thus, about 70% of that employment resided in the region. In 1973, the comparable figure was 14,700 and, therefore, also about 70%. These numbers also illustrate the fact that the effects of defense employment on the region have not changed significantly.

#### RETAIL TRADE

Retail trade is a basic service industry which produces no product of its own, but performs the necessary task of getting the goods produced by other

sections of the economy into the hands of the public. The volume of retail trade in a specific locality is also an important gage of economic activity. In this section, we will compare retail trade in Southeastern Connecticut with that of other areas of the state, as well as making comparisons among the towns of the region.

The most accurate and detailed information available at this time is that provided by the 1977 U.S. Census of Retail Trade. The data from this source for New London County are summarized in Table 17. This provides retail sales data for various classes of goods for the county and also for the towns where the greater portion of the county's sales took place.

The Census of Retail Trade also reports the number of employees for the week including March 12, 1977, for the same categories of goods and for the same towns. County total retail sales for these categories are compared with retail sales employment in Table 18. This table shows that the percentages of retail trade employment follow quite closely the percentages of retail sales, with a few exceptions. The largest differences are in two categories of "Eating and Drinking" and "Auto Dealers." The first of these differences is no doubt caused by the labor-intensive nature of the restaurant business while the second would seem to be the result of a situation which is just the reverse. In an auto dealership, it appears logical that there will be a high dollar volume of sales per employee.

Table 19 makes a similar comparison, but by town and not by class of sales. This table also gives data for employment in retail trade in 1982, provided by the Connecticut Labor Department. Here we can see that the highest percentages of the county's retail trade in 1977 were in the three urban towns of Groton, New London, and Norwich. Norwich has the highest volume of any town. This information is illustrated in Figure 8. The drawing shows the concentration of retail trade in the developed core of Southeastern Connecticut. That developed core, which was first defined in SCRPA's original studies of land use and development in the 1960's, runs through the southern towns along Long Island Sound and up both sides of the Thames River to Norwich. The towns for which no percentages are given are included in the "Balance of County." These are the towns which

TABLE 17: RETAIL SALES (\$1,000), 1977 NEW LONDON COUNTY, CONNECTICUT

Miscellaneous Retail	16,192	20,408	53,765		2,811	7,188	1,713#	1,150	2,187	8,374	9,517			93,435
Drug	1,298*	3,706	190,6		0	1,392	0	0	688	2,586	4,008		0	20,395
Eating & Drinking	13,701	11,409	35,163		1,042+	4,753	0	0	1,382	8,939	2,821		4,603	60,233
Furniture, Home Furnishings & Equipment	3,920	8,372	21,120		0	0	0	0	0	3,743	3,226		2,266	32,554
Apparel & Accessories	9,460	6,957	22,806		0	1,264	のの問題		0	0	418		302	26,786
Gasoline Service Stations	7,788*	5,260	25,710		0	6,154	2,488#	1,787	3,746	5,641	5,508		7,446	63,203
Automotive Dealers	18,560*	44,959	107,995		4,550+	8,346	0	0	19	18,883	6,886		6,571	156,569
Food	27,190	15,952	86,751		0	16,987	0	2,034	5,575	16,062	0		10,041	164,486
General Merchandise	15,447	35,129	72,929		458+	0	0	0	0	0	0		633	87,599
Building Materials Hardware Garden Supplies Mobile Homes	4,124	5,496	14,002		0	4,095	0	0	0	4,178	1,359		1,259	29,757
<u>Total</u>	120,976 <sup>®</sup>	157,648	452,598	V TOWNS:	25,176	51,386	11,833#	12,840	. 14,573	70,039	55,835	241,682	ITY: D	735,017
	Groton	New London	URBAN TOTALS:	SELECTED SUBURBAN TOWNS:	Colchester	East Lyme	Griswold	Ledyard	Montville	Stonington	Waterford	SUBURBAN TOTALS:	REMAINDER OF COUNTY: D	COUNTY TOTALS:

NOTE: D indicates item suppressed due to disclosure laws.

<sup>@</sup> total does not check due to suppression. \* Groton town only; + Colchester Borough only; # Jewett City only; Retail Trade, U.S. Bureau of the Census. SOURCE: 1977 Census of

TABLE 18: RETAIL SALES AND EMPLOYMENT, 1977 NEW LONDON COUNTY, CONNECTICUT

Types Of Establishments	Retail Sales, 1977 (Thousand \$)	Paid Employment For Week Including March 12, 1977	% of Total Sales	% of Total Employment
Building Materials, Hardware, etc.	29,757	422	4.1	3.2
General Merchandise	87,599	1,783	11.9	13.4
Food Stores	164,486	2,386	22.4	17.9
Auto Dealers	156,569	1,430	21.3	10.7
Gas Stations	63,203	737	8.6	5.5
Apparel and Accessories	26,786	609	3.6	4.6
Furniture	32,554	554	4.4	4.2
Eating and Drinking	60,233	3,481	8.2	26.1
Drug Stores	20,395	449	2.8	3.4
Miscellaneous	93,435	1,462	12.7	11.0
COUNTY TOTAL:	735,017	13,313	100.0	100.0

SOURCE: 1977 Census of Retail Trade, U.S. Bureau of the Census.

TABLE 19: DISTRIBUTION OF RETAIL SALES AND RETAIL EMPLOYMENT, 1977 AND 1982 NEW LONDON COUNTY, CONNECTICUT

				% 1977	1982	% 1982
Sample Towns	1977 Retail Trade (Thousand \$)	% Retail Trade	1977 Retail Trade Employment	Retail Trade Employment	Retail Trade Employment	Retail Trade Employment
COLCHESTER	(1) 25,176*	(2)	(3) 286*	2.1	(5) 450	(6)
EAST LYME	51,386	7.0	976	7.4	1,210	8.0
GRISWOLD	11,833+	1.6	181+	1.4	230	1.5
GROTON	120,976	16.4	2,469	18.5	3,840	20.1
LEDYARD	12,840	1.8	272	2.0	D	-
MONTVILLE	14,573	2.0	240	1.8	390	2.0
NEW LONDON	157,648	21.4	3,011	22.6	3,030	24.6
NORWICH	173,974	23.7	3,009	22.6	3,970	24.5
STONINGTON	70,039	9.5	1,249	9.4	1,170	10.2
WATERFORD	55,835	7.6	838	6.3	860	6.8
TOTALS:	694,280	94.4	12,531	94.1	15,150#	100.0#
BALANCE OF COUNTY	40,737	5.6	782	5.9	9713 36	NA DEMONIN
COUNTY TOTAL	735,017	100.0	13,313	100.0	oos p	347_70 84

NOTE: D = Item suppressed due to disclosure laws.

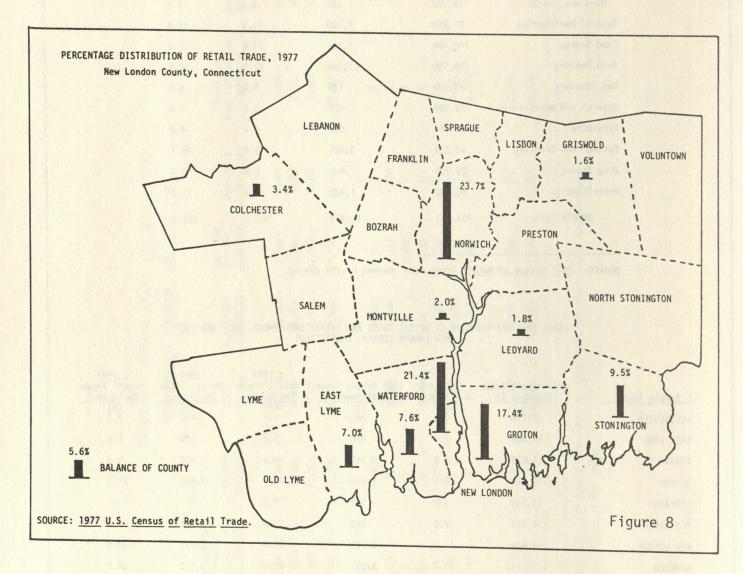
\* Borough only

+ Jewett City only

# Excludes Ledyard and balance of county.

SOURCES: Columns (1) and (3), 1977 U.S. Census of Retail Trade; Column (5), Connecticut Labor Department.

are less intensively developed than those located within the core. Since the figure for the "Balance of County" is only 5.6%, 94.4% of the 1977 retail trade was located in the towns for which percentages are given. It can be expected that the distribution illustrated here will be significantly changed by the opening of the Crystal Mall in Waterford, a major regional shopping center. This opening is planned for late in 1984.



The numbers given in Table 19 for 1982 employment in retail trade are significantly higher than those given by the 1977 Census. However, it must be remembered that the information source is different. The 1982 data are estimates by the State Labor Department based on unemployment tax returns while the 1977 Census data are based on a survey. Whether the increase shown between 1977 and 1982 actually occurred is not certain. However, it must be pointed

out that the percentage breakdown by town is quite similar for both sets of data, thereby suggesting that the geographic distribution of retail trade has not changed materially since 1977.

Table 20 compares the broad distribution of population in 1980 with the distribution of retail trade employment in 1977. This table shows that the percentage of New London County's retail trade employment in the urban towns is considerably higher than the percentage of population. A comparison with similar figures for 1972 and 1960 is of interest. In 1972,\* 50.0% of the population in the Southeastern Connecticut Region and 72.8% of the retail trade employment were located in the urban towns. In 1960, 58.9% of the population in the region and 78.2% of the retail trade employment were located in the urban towns. Although the latest data are for the county and not for the region, the trends of decreasing percentages of both retail trade employment and population in the urban towns are apparent. These trends illustrate the fact that population is moving to the suburbs, and that retail trade is doing the same, but at a slower rate. Once Crystal Mall in Waterford opens, the shift of retail employment to the suburbs should be even more pronounced.

TABLE 20: COMPARISON OF RETAIL EMPLOYMENT AND POPULATION, 1977 - 1980
NEW LONDON COUNTY, CONNECTICUT

	1980 Popul Number	ation % Total	ingros <sub>i</sub> Sant ing	1977 Retail Number	Employment % Total
Urban Towns	107,978	45.3		8,489	63.8
Remainder of County	130,431	54.7		4,824	36.2
TOTAL:	238,409	100.0		13,313	100.0

SOURCES: 1980 U.S. Census of Population, U.S. Bureau of the Census.

1977 U.S. Census of Retail Trade, U.S. Bureau of the Census.

<sup>\* 1972</sup> and 1960 data taken from <u>Recommended Regional Development Plan</u>, SCRPA, 1976.

Table 21 gives a town-by-town comparison of retail sales per capita. It can be seen that New London and Norwich have much the highest sales per capita, with Groton having the lowest figure of any of the three urban towns. New London's high figure is the result not only of a high retail trade volume, but of a comparatively low population, while Groton's situation is exactly the opposite. Several of the suburban towns have figures for retail trade per capita that are higher than Groton's.

Table 22 compares the 1977 New London County retail trade data with estimates of 1981 retail trade which appeared in the publication, "Sales and Marketing Management" for July of 1982. The estimated 1982 data show a substantial increase since 1977, of about 36%. However, if the effect of inflation is considered by changing the 1981 total figure to 1977 dollars by means of the consumer-price index, then the purchasing power utilized to make retail sales is considerably lower than the 1977 sales figure. The 1981 total sales figure of \$1,000,543,000 is reduced 33.3% to \$666,682,000 in 1977 dollars.

Table 23 and Table 24 provide a comparison of New London County's retail trade with the remainder of Connecticut. Table 23 compares retail sales per capita in New London County by category with the other counties of Connecticut. The table shows that New London ranks fifth out of the eight counties in total retail sales per capita, and, in general, ranks at about the same level with respect to the more detailed categories, with the exception of the "automotive" category, where it ranks second. Table 24 shows that New London County ranks sixth out of the eight counties in per capita effective income for 1981, and fifth in per capita retail sales.

TABLE 21: RETAIL SALES PER CAPITA, 1977 NEW LONDON COUNTY, CONNECTICUT

	Total Retail Sales 1977 (Thousand \$)	1980 Population	Retail Sales Per Capita (Thousand \$)
URBAN TOWNS:			
Groton	120,976	41,062	2.95
New London	157,648	28,842	5.47
Norwich	173,974	38,074	4.56
URBAN TOTALS:	452,598	107,978	4.19
SELECTED SUBURBAN TOWNS:			
Colchester	25,176	7,761	3.24
East Lyme	51,386	13,870	3.70
Griswold*	11,833	3,294	3.59
Ledyard	12,840	13,735	0.93
Montville	14,573	16,455	0.89
Stonington	70,039	16,220	4.31
Waterford	55,835	17,843	3.13
SUBURBAN TOTAL FOR ABOVE TOWNS:	241,682	89,178	2.71
SAMPLE TOTAL:	694,280	197,156	3.52
BALANCE OF COUNTY:	40,737	41,253	0.99
COUNTY TOTALS:	735,017	238,409	3.08

<sup>\*</sup> Jewett City only.

SOURCE: 1977 Census of Retail Trade, U.S. Bureau of the Census; 1980 Census of Population and Housing, U.S. Bureau of the Census.

TABLE 22: RETAIL SALES (\$1,000) COMPARISON, 1981 AND 1977 NEW LONDON COUNTY, CONNECTICUT

	Total Sales	Food Stores	Eating & Drinking	General Merchandise Stores	Furniture, Home Furnishings, Appliances	Automotive Dealers	Drug Stores	All Other*
1981	1,000,543	222,691	89,754	114,217	50,367	166,360	27,121	330,033
% of Total	100	22.2	9.0	11.4	5.1	16.6	2.7	33.0
1977	735,017	164,486	60,233	87,599	32,554	156,569	20,395	213,181
% of Total	100	22.4	8.2	11.9	4.4	21.3	2.8	29.0

<sup>\* &</sup>quot;All Others" includes apparel, gasoline stations, lumber, building materials, farm equipment, liquor Stores, other retail and non-store retailers.

SOURCES: 1977 Census of Retail Trade, U.S. Bureau of the Census.
1981 Data: Sales and Marketing Management, July, 1982.

TABLE 23: PER CAPITA RETAIL SALES BY CATEGORY, 1981\*
CONNECTICUT COUNTIES

County	Total Sales	Food Stores	Eating & Drinking Places	General Merchandise Stores	Furniture, Home Furnishings, Appliances	Automotive	Drug	<u>Other</u>
Fairfield	\$ 5,129	\$ 1,090	\$ 426	\$ 520	\$ 277	\$ 643	\$ 131	\$ 2,042
Hartford	5,879	1,368	611	703	248	772	199	1,978
Litchfield	3,845	946	309	367	80	635	134	1,374
Middlesex	4,420	978	462	603	146	629	142	1,460
New Haven	4,281	1,021	429	563	196	544	121	1,407
New London	4,197	934	376	479	211	698	1114	1,385
Tolland	3,491	1,068	305	385	60	484	115	1,074
Windham	3,832	1,002	348	245	127	523	114	1,473
Median	\$ 4,239	\$ 1,011	\$ 401	\$ 500	\$ 171	\$ 632	\$ 126	\$ 1,434

<sup>\* 1981</sup> sales divided by 1980 population.

SOURCE: Connecticut Market Data, 1983, Connecticut Department of Economic Development, 1983.

TABLE 24: POPULATION, EFFECTIVE BUYING INCOME, RETAIL SALES, 1980 AND 1981 CONNECTICUT COUNTIES

Counties	Population,	Per Capita Effective Buying Income, 1981	Per Capita Retail Sales, 1981*
Fairfield	807,143	\$13,381	\$ 5,129
Hartford	807,766	10,552	5,879
Litchfield	156,769	9,764	3,845
Middlesex	129,017	9,989	4,420
New Haven	761,337	9,437	4,281
New London	238,409	9,218	4,197
Tolland	114,823	9,141	3,491
Windham	92,312	8,058	3,832

<sup>\*</sup> Total 1981 retail sales divided by total 1980 population.

SOURCE: Connecticut Market Data, 1983, Connecticut Department of Economic Development, 1983.

Tourism is an important part of the economy of the Southeastern Connecticut Region and appears to have potential for economic growth. The center of tourism in the region is Mystic in the Town of Stonington, which contains two of Connecticut's most important attractions, Mystic Seaport and Mystic Marinelife Aquarium. Other major attractions which are located in Groton are the USS Croaker, a World War II U.S. Navy submarine which is operated by the Submarine Memorial Association, Inc., and Fort Griswold State Park, the site of a Revolutionary War battle.

All of these major attractions are located in close proximity to Interstate Route 95 and thus are able to draw attendance from travelers on that highway from outside of the immediate area. In addition, the towns of the region have much of a less obvious nature for the visitor to see. There is the coastline, Stonington Village with its 18th century houses and fishing fleet, Mystic, Noank, another former fishing village with much picturesque charm, the Thames River with its shipyards and Naval activity, and New London itself with its historic houses. In Norwich, there is the Norwichtown area with its handsome green and 18th century houses. The Marine Commerce and Development Commission in New London has been active in sponsoring marine parades and regattas, while Norwich has its annual Rose Arts Festival, a week-long midsummer fair which attracts many visitors from surrounding communities.

Some measures of the current size of the tourist industry in the region are given by the available statistics. In the Mystic area alone there are at least 650 motel rooms.\* Annual paid attendance at Mystic Seaport has grown from 78,000 in 1952 to 305,000 in 1962 and 450,000 persons in 1983. Annual attendance at the Mystic Marinelife Aquarium for 1983 was 650,000 persons.\*\*

Mystic Seaport's stature as a tourist attraction of national importance is indicated by the visitor's survey conducted by the institution in 1979. This indicates that only 17.5% of the yearly visits were by residents of Connecticut,

<sup>\*</sup> Mystic Chamber of Commerce.

<sup>\*\*</sup> Attendance figures for Mystic Seaport and Mystic Marinelife Aquarium obtained from those institutions.

while 57% of visitors were from the four-state area including Connecticut, New York, Massachusetts and Rhode Island. Seventy-eight percent of visitors, however, were from the Northeast, which includes New England, New York, New Jersey, and Pennsylvania. The increasing drawing power of the Seaport is indicated when these figures are compared with those of 1962, when almost 90% of the visitors came from a six-state area which included Connecticut, Massachusetts, New Jersey, New York, Pennsylvania and Rhode Island.\*

An important project that is in the planning stages at the present time is the permanent berth for the <u>U.S.S. Nautilus</u>, the world's first nuclear-powered submarine, at the U.S. Naval Submarine Base in Groton. The ship, and a museum of the Submarine Force will be open to the public. It is expected that a contract will be let for construction of the dock and museum building in early 1984. An annual attendance rate of 200,000 people is projected, with 42% of those visits occurring in the peak two months of July and August.\*\*

The tourist industry benefits from the fact that a tremendous variety in the scale of potential projects is possible. Projects can range in size from the construction of facilities to berth the <u>Nautilus</u> to the installation of a roadside sign indicating a historic site. Thus, there is scope for the conception of all sorts of new projects and for planning and coordination to provide not only facilities but common themes and ideas to enhance the potential of individual efforts.

<sup>\*</sup> Regional Economy, SCRPA, 1964.

<sup>\*\* &</sup>lt;u>U.S.S. Nautilus Memorial and Submarine Force Museum, Final Environmental Assessment</u>, U.S. Navy and the State of Connecticut, June, 1983.

In the mid-nineteenth century, agriculture employed more than half the labor force in Southeastern Connecticut. However, Table 6 in Chapter II shows that agricultural employment, combined with Forestry and Fishing, had dwindled to but 1.6% of the labor force by 1980.

For the past twenty years at least, the major categories of agricultural employment have been diary farming and poultry farming. Employment in dairy farming and poultry farming is currently estimated to be about 230 people and 250 people, respectively. The dominance of dairy and poultry farming is shown by Table 25, which gives agricultural sales data for New London County taken from the several U.S. Censuses of Agriculture from 1964 to 1982. The information from this table is illustrated in Figure 9 and Figure 10. Figure 9 shows that since 1974, the percentage of sales made accounted for by nursery and greenhouse products has increased significantly, while the percentage made up by poultry and poultry products has dropped slightly. The information from the earlier censuses is less detailed than that for 1982 and 1978. Therefore, Figure 10 illustrates the same trends carried back to 1964, utilizing the data available.

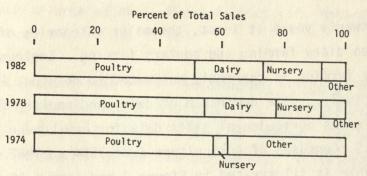
TABLE 25: TRENDS IN AGRICULTURAL SALES, 1964-1982 NEW LONDON COUNTY, CONNECTICUT

	198	2	197	8	1974	1	1969	9	196	4
	Thousand \$	% of Total	Thousand \$	% of Total	Thousand \$	% of Total	Thousand \$	% of Total	Thousand	% of Total
Poultry and Poultry Products	34,911	51.1	25,374	54.2	17,516	57.7	Total Company of the	1 264		
Dairy Products	15,381	22.5	10,868	23.2						
Cattle and Calves	2,275	3.4	1,795	3.8						
Other	420	0.6	297	0.6						
SUBTOTAL				and Percentage Lan	N . 1921 pt	Japa spul	4 - 126	THE .		
(Livestock, Poultry and their Products)	52,987	77.6	38,334	81.8	27,075	89.2	18,610	88.5	16,683	91.3
Nursery and Green- house Products	13,181	19.3	6,838	14.6	1,257	4.1				
Other Crops	2,127	3.1	1,698	3.6						
SUBTOTAL (Crops including				.seon	entrus in a	DECMORATE S	A . Table	berger		
Nursery and Green- house Products)	15,308	22.4	8,536	18.2	3,101	10.2	2,386	11.3		
GRAND TOTAL:	68,295	100.0	46,870	100.0	30,339	99.4*	21,040	99.8*	18,269	100.0

<sup>\*</sup> Percentages do not add to 100.0% due to discrepancy in data.

SOURCES: U.S. Censuses of Agriculture, 1982, 1978, 1974, 1969, Bureau of the Census.

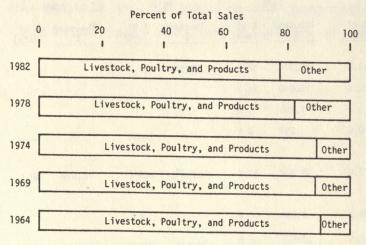
POULTRY, DAIRY, AND NURSERY AND GREENHOUSE PRODUCTS AS PERCENT OF TOTAL AGRIULTURAL SALES, NEW LONDON COUNTY



SOURCES: U.S. Censuses of Agriculture.

FIGURE 9

LIVESTOCK, POULTRY, AND THEIR PRODUCTS AS PERCENT OF TOTAL AGRICULTURAL SALES, NEW LONDON COUNTY



SOURCES: U.S. Censuses of Agriculture.

FIGURE 10

Tables 26 through 31 give additional data for New London County from the various U.S. Censuses of Agriculture.

TABLE 26: NUMBER OF FARMS AND ACREAGE, 1964-82
NEW LONDON COUNTY, CONNECTICUT

Year	Number of Farms	Acres	Acres/Farm
1964	913	121,265	133
1969	702	95,198	136
1974	519	79,382	153
1978	530	80,378	152
1982	573	82,709	144

SOURCE: U.S. Censuses of Agriculture, 1982, 1978, 1974, 1969. Bureau of the Census.

Table 26 shows that between 1964 and 1974 there was a dramatic decrease in farm acreage and numbers of farms. However, the table indicates that since that time, both of these figures have stabilized, and there have actually been slight increases in both numbers of farms and acreage.

Both Table 26 and Table 27 below indicate that the increase in the numbers of farms since 1974 has taken place in those of small/moderate size.

Table 29 below shows that a trend similar to that discussed above for poultry has taken place in dairy farming. Between 1964 and 1982, the number of dairy farms has decreased by about 74%, while the number of milk cows has decreased only by about 23%.

There is no ready answer to the question of why the number of smaller farms in the county has increased. One possibility which seems plausible is that the new small farms are owned at least in part by people whose principal income is derived from other sources, either in industry or in the service sector of the economy.

Table 28 below illustrates the consolidation and expansion that have taken place in poultry farming in the last two decades. In 1964, there were about two and one-half times as many poultry farms as there were in 1982, while the number of birds has tripled during the same time period.

TABLE 27: SIZE OF FARMS, 1969-82 NEW LONDON COUNTY, CONNECTICUT

		Number of	Farms	
Farms by Size (Acres):	1982	1978	1974	1969
1 - 9 acres	52	45	41	60
10 - 49	143	118	90	152
50 - 179	221	211	235	321
180 - 499	131	127	131	142
500 - 999	24	28	19	24
1000 - 1999	2	1	3	3
2000 or more	867 38		-	<b>9</b> 页 -
NUMBER OF FARMS:	573	530	519	702

SOURCE: U.S. Censuses of Agriculture, 1982, 1978, 1974 and 1969. Bureau of the Census.

TABLE 28: POULTRY FARMING TRENDS, 1964-82 NEW LONDON COUNTY, CONNECTICUT

Year	Farms	Chickens 3 Months Old and Older
1964	255	924,295
1969	168	1,816,788
1974	102	1,715,409
1978	101	2,481,907
1982	90	3,074,666

SOURCE: U.S. Censuses of Agriculture, 1982, 1978, 1974, 1969, Bureau of the Census.

TABLE 29: DAIRY FARMING TRENDS, 1964-82 NEW LONDON COUNTY, CONNECTICUT

Year	Farms	Milk Cows
1964	459	12,054
1969	241	9,161
1974	186	8,857
1978	187	8,783
1982	181	9,236

SOURCE: U.S. Censuses of Agriculture, 1982, 1978, 1974 and 1969. Bureau of the Census.

TABLE 30: ACREAGE IN ORCHARDS, 1964-82 NEW LONDON COUNTY, CONNECTICUT

Year	Farms	Acres
1964	39	529
1969	29	440
1974	23	408
1978	30	495
1982	49	629

SOURCE: U.S. Censuses of Agriculture, 1982, 1978, 1974, 1969, Bureau of the Census.

Although the acreage in orchards in New London County is not large, it is interesting to note that it has increased substantially since 1974, after a decline during the 1960's. (See Table 30.) At the same time, the number of farms reporting acreage in orchards has also increased. We have already mentioned the possibility that the increase in the number of small farms could be due to an increase in the number of farms which are not the primary source of income for their owners. It seems possible that some of the new small orchards could be in this category.

Data are not available for the years prior to 1978 for nursery and green-house products. (See Table 31, below.) However, the data that we have are of interest in comparison with the information on agricultural sales presented in Table 25 and Figure 9. These show that sales of nursery and greenhouse products have increased as a percentage of the county's total agricultural sales since 1978. However, Table 31 shows that both the number of farms and the acreage in this use have decreased since 1978, but that the number of square feet of space in buildings have increased markedly.

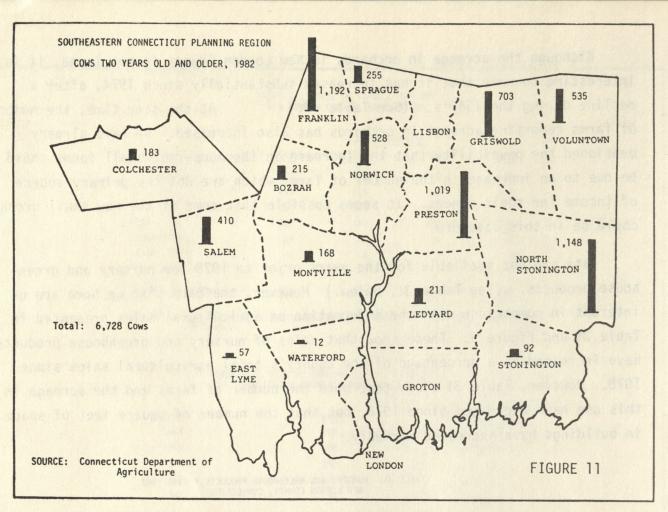
TABLE 31: NURSERY AND GREENHOUSE PRODUCTS,\* 1978-1982 NEW LONDON COUNTY, CONNECTICUT

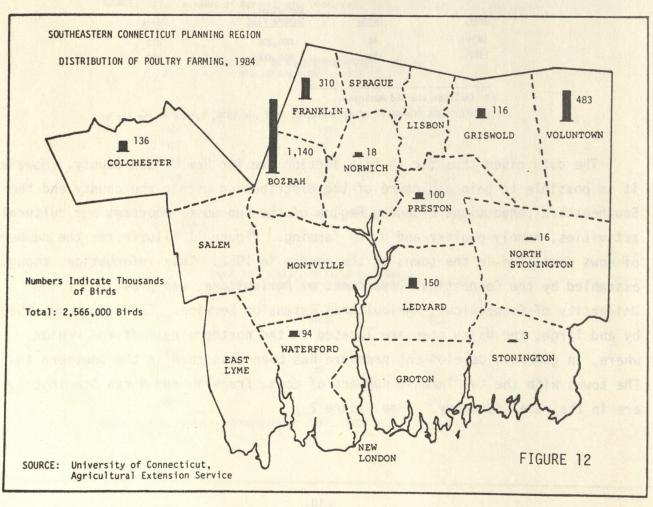
		Buildings,	
Year	Farms	Square Feet	Acres
1978	44	685,806	472
1982	38	919,416	esste of 337 so grane stell

<sup>\*</sup> Includes sod and mushrooms.

SOURCE: U.S. Censuses of Agriculture, 1982 and 1978, Bureau of the Census.

The data given thus far in this section are for New London County. However, it is possible to gain a picture of the distribution within the county and the Southeastern Connecticut Planning Region of the two most important agricultural activities, namely poultry and dairy farming. Figure 11 illustrates the numbers of cows domiciled in the towns of the region in 1982. This information, though assembled by the Connecticut Department of Agriculture, was provided by the University of Connecticut, Agricultural Extension Service. The map shows that, by and large, the dairy cows are located in the northern half of the region, where, in general, development pressure has been less than in the southern towns. The towns with the two largest numbers of cows, Franklin and North Stonington, are in the rural category. (See Figure 2.)





Tables 25 through 31, above, report agricultural data at the county level. There are three towns in New London County that are not in the planning region. These are Lyme, Old Lyme and Lebanon. The Connecticut Department of Agriculture lists Old Lyme as containing no cows of any description in 1982, while 173 cows two years old or older were domiciled in Lyme, and 2,307 cows two years old or older were domiciled in Lebanon. Thus, Lebanon contains 34% as many cows as the entire Southeastern Region. As will be described below, it is also the town in the county with the most activity in poultry farming. Thus, the effect of Lebanon should be considered when studying the data for New London County.

Figure 12 displays data provided by the University of Connecticut, Agricultural Extension Service, which show the distribution of poultry farming in the region. It should be noted that the towns with the highest numbers of birds, Bozrah, Franklin and Voluntown, are also among those most active in the region in dairy farming. The only town in New London County, but not in the region, which contains any poultry farming is Lebanon, for which the figure of 1,622,000 birds is given in the data. This is more than any other town in the county or region, although Bozrah's figure of 1,140,000 birds is quite comparable. A discussion with personnel of the University of Connecticut, Agricultural Extension Service, indicates that it is natural for dairy and poultry farming to locate near each other because manure from poultry farming can be used by dairy farms as fertilizer for crops raised for cattle feed.

Although agriculture provides but a small part of the region's employment, it contributes a great deal to its character. The open space that it provides is very important in an area which is becoming more and more urbanized. Perhaps just as important, agriculture is a visible reminder that production of foodstuffs is essential to our lives. This is especially relevant since much of our food is grown in other parts of the country, and, thus, we are tempted to take it for granted. The farms in Southeastern Connecticut illustrate our ultimate dependency on the natural world.

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#### COMMERCIAL FISHING\*

### Introduction

The commercial fishing industry continues to expand in New London County as it responds to:

- Changes in stocks of fishery resources,
- National and State legislation,
- Growth in international trade involving seafood products, and
- Waterfront development.

These changes have created both opportunities and obstacles for Southeastern Connecticut's fishing industry.

This study provides an overview of this industry with emphasis upon current statistics describing: (1) fishery landings (in pounds); (2) landed value (in dollars); (3) fisheries employment and craft; (4) a review of current shoreside facilities; and (5) current issues affecting the industry.

Commercial fishing is the catching, taking, harvesting, cultivating, or farming of any kind of fish, shellfish or other aquatic forms of animal and plant life for sale. The New London County industry produces aquatic products harvested within the waters of the State of Connecticut,\*\* other state's waters, and the Fisheries Conservation Zone<sup>+</sup> (FCZ) of the United States which are then landed in New London County ports.

The industry includes aquatic products legally defined as common property resources, as well as those aquatic resources located on underwater lands owned by or leased to individuals or corporations.

<sup>\*</sup> This analysis was prepared by Norman K. Bender, Regional Marine Economics Specialist, Marine Advisory Service, Cooperative Extension, University of Connecticut, Groton, whose assistance is gratefully acknowledged.

<sup>\*\*</sup> State's waters extend from coastal baselines out to a boundary three nautical miles seaward of the baselines.

<sup>+</sup> The FCZ, authorized by the U.S. Magnuson Fisheries Conservation and Management Act of 1976, is a 197 nautical mile zone extending from a line three nautical miles off U.S. coasts outward to a line 200 nautical miles from U.S. coastal baselines. It is commonly called the 200 mile fishery zone.

Fisheries resources commonly landed in the county can be placed into these basic groups:

- 1. <u>Dermersal</u> Groundfish or bottom feeders including high value species like yellowtail and blackback flounders, and cod. These are the major finfish species landed in Stonington, Connecticut.
- 2. Anadramous Species like shad that migrate from coastal streams to ocean waters and back again to coastal streams. Commonly caught in the Connecticut River and landed in nearby ports.
- 3. <u>Cadramous</u> Species like eels which migrate from ocean waters to fresh water streams and back to the open ocean.
- 4. Pelagic Species like tuna and herring that are surface feeders.
- Crustacea Shellfish species such as lobsters and crabs that are mobile bottom feeders.
- 6. Benthic Molluscan shellfish species like oysters, clams and scallops.

# Current Industry Statistics

Following is a review of fisheries landings, landed value and employment data for 1977, 1981 and 1982 for the harvesting sector, which consists primarily of fishermen harvesting fish from vessels (five net tons or more), boats (less than five net tons) and shoreside facilities.

# (1) Fisheries Landings Appropriate the most

Landings data establish the total pounds of fisheries products brought ashore in New London County ports. Commercial fishermen often sell their catch in different ports in Connecticut and other nearby states.

For example, a Stonington fishing vessel may decide to land its catch in either Stonington, Connecticut; Montauk or Greenport, New York; Point Judith or Newport, Rhode Island, depending upon alternative fish prices offered by fish buyers or brokers in these ports. Likewise, fishing

captains from other ports (and states) may land fish in Stonington due to competitive prices available there. Landings and landed value data shown in Tables 32 and 34 reflect fish brought ashore within the county regardless of the vessel's or boat's home port.

Fisheries landings exhibited an upward trend for both finfish and shellfish species. Total landings in the county increased 210% from 1977 to 1982. This is a result of increased landings of flounders (yellowtail and blackback), lobsters, cod, butterfish and bluefish.

### (2) Fisheries Landed Value

Landed value refers to the total value (price x quantity) of fishery resource unloaded at dockside. This is the value to fishermen when they transfer their catch from a fishing vessel or boat to a shoreside buyer or fish broker.

The dollar figures in Table 34 are not adjusted for inflation. They reflect the inflated value of fishery landings in New London County for each given year.

An index of ex-vessel fishery prices received by New England fishermen for common species is shown in Table 35.

The Producers Price Index for the 1977-82 period (1967 = 100) went from 194.2 (1977) to 299.3 (1982). When converted to percentages of price changes from 1977 to 1982, the percentage price change New England fishermen received for all finfish (48%) was slightly lower than the percentage change in the Producer Price Index for all Commodities (54%).

However, the figures for major New London County species show that their price increases during this period fell below the national average (54%): cod (45%), yellowtail flounder (13%), other flounders (49%), and lobster (20%). Also significant is that yellowtail flounder (13%) and lobster (20%), are the major species landed by the entire New London County fleet. Thus, while total landings of yellowtail flounder and lobster account for most of the total landings increase from 1977 to 1982, the percentage increase in

TABLE 32: FISHERIES LANDINGS, 1977, 1981, AND 1982 NEW LONDON COUNTY, CONNECTICUT

Year	Landings (1bs.) Finfish*	Landing (lbs.) Shellfish <sup>+</sup>	Annual Total (lbs.)
1977	2,577,000	333,000	2,910,000
1981	4,563,000	698,000	5,261,000
1982	4,423,000	658,000	5,081,000

<sup>\*</sup> Finfish landings include over twenty-five species. Major species include blackback flounder, yellowtail flounder, butterfish, cod, whiting, bluefish and shad.

SOURCE: Marine Fisheries Office, Department of Environmental Protection, State of Connecticut.

TABLE 33: LANDINGS BY MAJOR SPECIES, 1977, 1981, AND 1982 NEW LONDON COUNTY, CONNECTICUT

Species	Landings (1bs.)	Landings (1bs.)	1982
Bluefish	5,400	235,000	270,000
Butterfish	28,000	501,000	500,000
Cod	49,000	502,000	514,000
Flounder- Blackback	574,000	1,091,000	1,163,000
Flounder- Yellowtail	383,000	1,501,000	1,501,000
Shad	93,000	49,000	42,000
Whiting	97,000	102,000	100,000
Unclassified Speci	es 781,000	31,000	25,000
Shellfish	cyc. The class	effical points	
Lobsters	213,000	637,000	691,000

SOURCE: Marine Fisheries Office, Department of Environmental Protection, State of Connecticut.

TABLE 34: FISHERIES LANDED VALUE, 1977, 1981, AND 1982 NEW LONDON COUNTY, CONNECTICUT

Year	<u>Finfish</u>	Landed Value (\$)Shellfish	Annual Total (\$)
1977	\$ 578,000	\$ 622,000	\$1,200,000
1981	1,873,000	1,807,000	3,680,000
1982	1,932,000	1,746,000	3,678,000

SOURCE: Marine Fisheries Office, Department of Environmental Protection, State of Connecticut.

<sup>+</sup> Shellfish landings includes lobster, scallops, oysters, conchs, and clams. Major species are lobsters and scallops.

price received by fishermen for these two species was far below the average percentage increase received by all producers of goods and services.

Fishermen landing whiting (83% increase) and sea scallops (126% increase) came out ahead of the Producer Price Index for All Commodities (54%).

## (3) Fisheries Employment and Craft

Harvesting of fisheries resources takes place from fishing vessels (documented vessels of the United States which are five net tons or more), fishing boats (less than five net tons) and from along the shoreline.

The commercial fishing industry in New London County consists of two major sectors: inshore and offshore fleets. The inshore fleet closely corresponds to the 243 fishermen working from boats and the shoreline listed in Table 36. These fishermen use approximately 216 fishing boats, which range from fishing skiffs with outboard engines to lobster boats and small draggers. Boat sizes vary from 16-20 feet for many skiffs to 28-42 feet for the lobster boats and draggers.

Inshore fishermen listed as regular could be defined as full-time fishermen earning a majority of their income from fishing activities. Casual fishermen are those fishing on a part-time basis and often working in a shoreside job in a factory or office facility. The close proximity of shore-based employers like the Electric Boat shipyard, U.S. Submarine Base and Naval Underwater Systems Center, as well as numerous factories in the county provide a source of part-time fishermen in the region.

The offshore fleet consists of twenty-seven fishing vessels operating out of Stonington. Offshore vessels vary in size from 50-85 feet in length. In 1982, there were eighty-four fishermen working on documented fishing vessels homeported within the New London County. These jobs would primarily be on a full-time basis with some seasonal variations.

Employment in shore-based fishing activities is a small, but growing sector of the industry. There are two major seafood processing firms employment 20-30 people with seasonal variations due to weekly changes in

FISHERIES LANDINGS (Million lbs.), 1977, 1981, and 1982 New London County, Connecticut

FISHERIES LANDED VALUE (Million \$), 1977, 1981, 1982 New London County, Connecticut

1977: XXXXXXXXXXXXXXXXXXX 2.6

1977: XXXXXXXXXXX 1.2

1981:

4.6 1981: 

1982:

1982: 

3.7 3.7

Source: Connecticut Department of Environmental Protection.

Source: Connecticut Department of Environmental Protection.

FIGURE 13

FIGURE 14

TABLE 35: INDEXES OF EX-VESSEL PRICES FOR SELECTED NEW ENGLAND FISHERIES 1977 AND 1982 (1967 = 100)

Species	1977	1982(estimate)	Percentage Change In Ex-Vessel Prices Index 1977 - 1982
Cod	284.6	418.5	45%
Yellowtail Flounder	432.4	490.4	13%
Other Flounder	278.3	415.5	49%
Whiting	213.6	391.2	83%
All New England Finfish	(298.9)	(442.6)	(48%)
Lobster	245.1	304.5	20%
Sea Scallops	216.0	488.2	126%

Fisheries of of Commerce, the United States, 1982, page 67, NMFS, NOAA, U.S. Department April, 1983.

TABLE 36: COMMERCIAL FISHING CRAFT, 1982 NEW LONDON COUNTY, CONNECTICUT

Type Of	00
Fishing Craft	1982
Fishing boats and shore*	216
Fishing vessels**	27
Total number of fishing boats, vessels, and shoreline	243

Fishing boats are less than five net tons as determined by the U.S. Coast Guard.

SOURCE: Connecticut Department of Environmental Protection.

Fishing vessels are five net tons or larger as determined by the U.S. Coast Guard.

fisheries landings. This sector has grown recently in response to increased fisheries landings since 1977. Increased processing capacity may lead to increased fishery landings in Stonington as that port re-establishes itself as a significant regional fishing port.

TABLE 37: FISHERIES EMPLOYMENT ON VESSELS, BOATS, AND FROM THE SHORELINE NEW LONDON COUNTY, CONNECTICUT

	1932
Number of fishermen working on boats and from the shoreline:	
- Regular	30
- Casual	214
Number of fishermen working on vessels	84
Total number of fishermen working on fishing boats, vessels, and from the shoreline	328

SOURCE: Connecticut Department of Environmental Protection.

## (4) A Review of Current Shoreside Facilities

Fishing vessels and boats require docks and related shoreside facilities to offload fish, provide fuel and ice, store trawl nets, and lobster traps and other fishing gear.

The major fishing dock facility in the county is the Stonington fishermen's dock, which averages five dock workers when required to offload a fishing vessel. The Stonington dock provides permanent and transient dockage, ice, fuel and offloading services. It is presently undergoing expansion of the ice, fuel and off-loading dock facilities.

The overwhelming majority of finfish landings in the county and the entire state occurs in Stonington. Other major species landed there include sea scallops and lobsters.

Outside of Stonington, fisheries resources are landed at small docks by individual fishermen who then transport their catch to wholesale fish firms, retail seafood markets, and local restaurants. The inshore fleet of about 216 boats competes for dock space with recreational boaters in the county's marinas and private docks.

Major growth in the Stonington Fish Dock has lead to increased landings and processing facilities in that port, resulting in new offshore vessels

offloading there. This situation contrasts with the inshore fleet having continual difficulty in obtaining adequate dock facilities at affordable fees.

## (5) Current Issues Affecting the Industry

The entire fishing industry (inshore and offshore) experienced increases in landings and landed value since March 1, 1977 when the 200-nautical-mile Fishery Conservation Zone was implemented under the United States Fisheries Conservation and Management Act of 1976 (FCMA). The offshore fleet expanded in response to a reduction in foreign fishing activities off the New England coast and conservation measures enacted under the FCMA. Stonington's fleet grew during the 1977-82 period, with future prospects pointing toward increased landings and processing of fishery resources in and around the port.

The inshore fleet also expanded during the 1977-82 period, with many new fishermen entering the industry in response to publicity about the fishing boom caused by the 200-mile fishing zone. The growth in the inshore fleet was not a result of major increases in the inshore fishery stocks (primarily lobster) but rather a spillover of interest caused by publicity about the new offshore fishery management regime.

Major issues affecting the economic profitability of the fishing industry must start with the condition of the fishery stocks. Management of fishery resources found within the Fishery Conservation Zone is the responsibility of the National Marine Fisheries Service, U.S. Department of Commerce in cooperation with the New England Fishery Management Council.

Connecticut agencies responsible for managing fish stocks are: The State Department of Environmental Protection (finfish and lobster), the State Department of Agriculture (shellfish) and coastal municipalities (shellfish). Major concerns include the condition of specific fishery resources and the resulting conservation and management methods used to ensure a continuing harvest of these resources over time.

Marketing opportunities for Connecticut seafood products are expanding due to the tapping of foreign markets and increased per capita seafood consumption in the United States. Questions relating to adequate quantity and quality of seafood products need to be resolved as local fishermen attempt to enter new markets (both domestic and foreign).

Expansion of the harvesting sector has brought pressure for improvements in shoreside facilities providing dockage, cold storage, ice and fuel and processing services. Continuing expansion of the fishing fleet will require additional shoreside facilities. While Stonington's fish dock has upgraded and expanded its facilities for the offshore fleet, inshore fishermen in other areas of the county face gradual reduction of dock facilities due to the development of condominiums, and other non-water dependent uses encroaching upon the waterfront.

In summary, the New London County fishing industry continues to respond to the availability of fishery resources found in Long Island Sound, southern New England and offshore waters. A combination of adequate fish stocks, resource management measures, modern harvesting and processing techniques, together with new shoreside facilities and competitive financing arrangements can ensure that the industry continues to provide fresh seafood and employment opportunities for Southeastern Connecticut.

#### V. REGIONAL INCOME

### REGIONAL MEDIAN INCOME

Certain basic demographic data was requested of all persons (e.g., sex, age, race) in the 1980 Census, while other data (e.g., income, education, employment) was requested on a sample basis. Two sampling rates were utilized. For communities of less than 2,500 persons, one-half of all housing units were included in the sample. In all other places, one-sixth of the housing units were sampled. Nationwide, the two rates resulted in about a 19% sampling rate. 1979 income data was a sample item.

Median family income in Southeastern Connecticut for 1979 was \$20,342 compared to a statewide median of \$23,151. Table 38 shows that five towns in Southeastern Connecticut had a median above this statewide median. Connecticut's family median was the second highest in the country for 1979.

Median family income for towns in Southeastern Connecticut ranged from a high of \$25,446 in East Lyme, to a low of \$16,673 in New London, as shown on Table 38. This high figure is about 25% above the regional median, while the low figure is 18% below the median. The East Lyme median is approximately 53% greater than the New London median. In 1969, the town with the highest median, Ledyard, was about 34% greater than the town with the lowest median, Sprague.

Among the fifteen planning regions that comprise Connecticut, the Southeastern Region's median family income was next to the lowest. Only the Northeastern Region, with a family median income of \$19,196, was lower. The Southwestern Planning Region was the highest at \$31,665. This same relationship holds in terms of Connecticut's eight counties. New London County, with a median family income of \$20,536, was next to the lowest; Windham County, which had a median of \$18,895, was the lowest. Fairfield County was highest, with a \$26,604 median.

Table 38 shows what appear to be very high rates of growth in median family income from 1969 to 1979. This is reflected in Table 39 which shows the changes

TABLE 38: MEDIAN FAMILY INCOME 1979 AND 1969 SOUTHEASTERN CONNECTICUT PLANNING REGION

979 NO	1979 Percentages	5.0	10.9	48.6	35.5	0 001	0.000	and Housing, Bureau of					KS, 1969 AND 1979		Median Income,	1967 Dollars	\$9,522	\$9,378	- 1.5	u of the Census, 1981, usus of Population and
TABLE 39: INCOME DISTRIBUTIONS, 1969-1979 SOUTHEASTERN CONNECTICUT PLANNING REGION	1969 Percentages	14.8	31.8	49.4	4.0	100.0		SOUNCESS: SUMMINGLY Tabe File 34, 1980 Census of Population and Housing, Bureau of the Census; Social Indicators, SCRPA, 1973					MEDIAN INCOMES IN ACTUAL AND CONSTANT DOLLARS, 1969 AND 1979 SOUTHEASTERN CONNECTICUT PLANNING REGION		Median Income,	Actual Dollars	\$10,452	\$20,342	+ 94.6	Statistical Abstract of the United States, Bureau of the Census, 1981, Table 765, p. 458; Summary Tape File 34, 1980 Census of Population and Housing, Bureau of the Census.
TABLE	Annual Income	\$4,999 or less	\$5,000 - 9,999	\$10,000 - 24,999	\$25,000 or greater	TOTALS:	SOURCE The same of the sa	the Census; Soc	の なが で なながら の の な			TABLE AC. MINISTER				rear	1969	1979	Percent Change 1969-1979	SOURCES: Statistical Abs Table 765, p. 4 Housing, Bureau
% Increase	1.5.1	114.7	105.5	115.1	98.1	7.701	93.9	113.4	137.4	89.3	88.6	104.8	88.8	74.1	91.9	84.1	72.6	94.6	0.96	107.6
1969 Median Income, \$	11,828	11,421	11,496	10,763	11,645	11,000	11,426	10,295	9,134	11,129	11,009	177,6	9,833	10,295	9,584	89,768	9,657	10,452	11,811	6,590
1979 Median Income, \$	25,446	24,519	23,630	23,154	23,076	22,843	22,152	21,972	21,687	21,066	20,763	20,011	18,567	18,469	18,394	17,985	16,673	20,342	23,151	19,908
TOWN	East Lyme Ledyard	Franklin	North Stonington	Preston	Waterford	Salem	Colchester	Stonington	Sprague	Montville	Bozrah	Lisbon	Griswold	Voluntown	Groton	Norwich	New London	Region	Connecticut	United States

SOURCES: Summary Tape File 3A, 1980 Census of Population and Housing, Bureau of the Census; Social Indicators, SCRPA, 1973.

in income distributions from 1969 to 1979. The significant changes have been the reduction of the two lowest categories (less than \$10,000) and the increase of the largest category (\$25,000 and greater) in 1979.

The numbers shown in Tables 38 and 39 reflect actual dollars for each time period and, therefore, include the effects of inflation which occurred over the decade. If one compensates for inflation, the results change dramatically. Table 40 presents the actual median incomes and the median incomes which would have occurred had the value of the dollar been held constant at 1967 levels.

Table 40 reveals that the median income growth experienced did not keep up with inflation and actually resulted in a loss in income and buying power. The regional median income would have had to equal \$20,653 in 1979 just to stay equal with the effects of inflation.

## POVERTY WITHIN SOUTHEASTERN CONNECTICUT

The term "poverty" connotes a complex set of economic, social and psychological conditions. The standard statistical definition provides only estimates of economic poverty based on the receipt of money income before taxes. Excluded from the income concept is a measure of the benefits derived from the receipt of in-kind government transfers, such as food stamps, medicaid, and public housing; private transfers such as health insurance premiums paid by employers; the value of the services obtained from the ownership of assets, such as owner-occupied housing units; and the receipt of money from the sale of property, withdrawal of bank deposits, gifts and money borrowed. The poverty threshold for a family of four with two related children under eighteen was \$7,356 in 1979. A comprehensive review of the current poverty definition and its limitations can be found in <a href="Internations can be found in The Measure of Poverty">Internations Can be found in The Measure of Poverty</a>, United States Department of Health, Education and Welfare, April, 1976.

Table 41 compares the number of individuals within Southeastern Connecticut below the poverty level in 1969 and 1979. In 1979, 18,233 persons were classified as poor, a drop of nearly 11% from the comparable total in 1969. Between 1969 and 1979, the number of persons in poverty in the region declined by a net total of 2,215. The greatest contributor to this drop was the sharp drop (nearly 50%) in the number of persons below the poverty level living in Groton.

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TABLE 41: POVERTY STATUS, 1969 AND 1979	2
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TABLE 42: ESTIMATED 1979 INCOME BY TYPE SOUTHEASTERN CONNECTICUT PLANNING REGION

	10,273	11,406	17,453	39,132		2,163	4,024	3,339	2,053	994	4,309	1,048	1,032	7,781	7,552	34,295		657	455	1,067	476	929	3,311	76,738
	14,428	12,362	15,039	41,829	ence E è	2,051	7,691	1,983	4,330	675	4,284	1,566	814	15,375	10,270	49,039	(A)	716	511	1,461	089	578	3,946	94,814
	214,069	134,455	119,911	548,435		50,033	181,66	44,835	94,902	18,047	95,013	26,051	17,756	104,062	117,928	667,808		12,769	10,472	27,766	16,840	9,002	76,849	1,293,092
URBAN TOWNS:	Groton	New London	Norwich	URBAN TOTALS:	SUBURBAN TOWNS:	Colchester	East Lyme	Griswold	Ledyard	Lisbon	Montville	Preston	Sprague	Stonington	Waterford	SUBURBAN TOTALS:	RURAL TOWNS:	Bozrah	Franklin	North Stonington	Salem	Voluntown	RURAL TOTALS:	REGIONAL TOTALS:
40 4	1.14.4	4.4.	+ 12.5	- 12.9		- 19.2	- 39.5	+ 31.8	0	+ 42.8	+ 69.9	+ 38.7	- 11.7	- 46.9	- 7.3	- 3.9		- 58.3	+315.0	- 51.7	+ 28.2	- 18.1	25.3	- 10.8
2,918	A 340	64664	4,689	11,956		307	409	787	564	217	1,266	301	166	747	906	5,670		88	83	141	159	136	209	18,233
5,765	3 801	19010	4,16/	13,733		380	9/9	265	564	152	745	217	188	1,406	776	5,902		1112	20	292	124	991	813	20,448
Groton	New London	Norwich	NO MICH	URBAN TOTALS:	SUBURBAN TOWNS:	Colchester	East Lyme	Griswold	Ledyard	Lisbon	Montville	Preston	Sprague	Stonington	Waterford	SUBURBAN TOTALS:	RURAL TOWNS:	Bozrah	Franklin	North Stonington	Salem	Voluntown	RURAL TOTALS:	REGIONAL TOTALS:
	5.765 2.918 2.49.4	5,765 2,918 - 49.4 Groton 214,069 14,428	5,765 2,918 - 49.4 Groton 214,069 14,428 4,349 + 14.4 New London 134,455 12,362	5,765 2,918 - 49.4 Groton 214,069 14,428 3,801 4,349 + 14.4 New London 134,455 12,362 4,167 4,689 + 12.5 Norwich 199,911 15,039	1,765 2,918 - 49.4 Groton 214,069 14,428 Groton 3,801 4,349 + 14.4 New London 134,455 12,362 4,167 4,689 + 12.5 Norwich 199,911 15,039 5: 13,733 11,956 - 12.9 URBAN TOTALS: 548,435 41,829	5,765 2,918 - 49.4 Groton 214,069 14,428 3,801 4,349 + 14.4 New London 134,455 12,362 4,167 4,689 + 12.5 Norwich 199,911 15,039 13,733 11,956 - 12.9 URBAN TOTALS: 548,435 41,829	5,765       2,918       - 49.4       Groton       214,069       14,428         3,801       4,349       + 14.4       New London       134,455       12,362         4,167       4,689       + 12.5       Norwich       199,911       15,039         13,733       11,956       - 12.9       URBAN TOTALS:       548,435       41,829         55:       380       307       - 19.2       Colchester       50,033       2,051	5,765 2,918 - 49.4 Groton 214,069 14,428 3,801 4,349 + 14.4 New London 134,455 12,362 4,167 4,689 + 12.5 Norwich 199,911 15,039 13,733 11,956 - 12.9 URBAN TOTALS: 548,435 41,829  SUBURBAN TOWNS:  5.3 380 307 - 19.2 Colchester 50,033 2,051 676 409 - 39.5 East Lyme 99,181 7,691	5,765 2,918 - 49.4 Groton 214,069 14,428 3,801 4,349 + 14.4 New London 134,455 12,362 4,167 4,689 + 12.5 Norwich 199,911 15,039 13,733 11,956 - 12.9 URBAN TOTALS: 548,435 41,829  SUBURBAN TOTALS: 50,033 2,051 676 409 - 39.5 East Lyme 99,181 7,691 597 787 + 31.8 Griswold 44,835 1,983	5,765 2,918 - 49.4 Groton 214,069 14,428 Groton 4,349 + 14.4 New London 134,455 12,362 A,167	5,765 2,918 - 49.4 Groton 214,069 14,428   3,801 4,349 + 14.4 New London 134,455 12,362   4,167 4,689 + 12.5 Norwich 199,911 15,039   13,733 11,956 - 12.9 URBAN TOTALS: 548,435 41,829   5. 380 307 - 19.2 Colchester 50,033 2,051   676 409 - 39.5 East Lyme 99,181 7,691   597 787 + 31.8 Griswold 44,835 1,983   564 564 564 0 152 Clichester 50,033 2,051   676 409 - 409 675 675 675   152 217 + 42.8 Lisbon 18,047 675	5,765 2,918 - 49.4 Groton 214,069 14,428 3,801 4,349 + 14.4 New London 134,455 12,362 4,167 11,956 - 12.9 URBAN TOMNS:  3,801 4,349 + 14.4 New London 134,455 12,362 12,362 Norwich 199,911 15,039 41,829 113,733 11,956 - 12.9 URBAN TOMNS:  5.3 380 307 - 19.2 Colchester 50,033 2,051 676 409 - 39.5 East Lyme 99,181 7,691 675 64 564 564 609 Ledyard 94,902 4,330 152 217 + 42.8 URBAN TOWNII 995,013 4,284	5,765       2,918       - 49.4       Groton       214,069       14,428         3,801       4,349       + 14.4       New London       134,455       12,362         4,167       4,689       + 12.5       Norwich       199,911       15,039         13,733       11,956       - 12.9       URBAN TOTALS:       548,435       41,829         5.       380       307       - 19.2       Colchester       50,033       2,051         676       409       - 39.5       East Lyme       99,181       7,691         597       787       + 31.8       Griswold       44,835       1,983         564       564       0       Ledyard       94,902       4,330         152       217       + 42.8       Lisbon       18,047       675         745       1,266       + 69.9       Montville       95,013       4,284         217       + 38.7       Preston       26,051       1,566	5,765 2,918 - 49.4 Groton 214,069 14,428 3,801 4,349 + 14.4 New London 134,455 12,362 4,167 4,689 + 12.5 Norwich 199,911 15,039 13,733 11,956 - 12.9 URBAN TOTALS: 548,435 41,829  SUBURBAN TOTALS: 548,435 41,829  SUBURBAN TOWNS: 567 409 - 39.5 East Lyme 99,181 7,691 597 787 + 31.8 Griswold 44,835 1,983 564 564 0 Ledyard 94,902 4,330 152 217 + 42.8 Lisbon 18,047 675 745 1,266 + 69.9 Montville 95,013 4,284 217 301 + 38.7 Preston 26,051 1,566 188 166 - 11.7 Sprague 17,756 814	5,765 2,918 - 49.4 Groton 214,069 14,428 12,362 4,167 4,889 + 14.4 New London 134,455 12,362 12,362 4,167 4,689 + 12.5 Norwich 199,911 15,039 13,733 11,956 - 12.9 URBAN TOTALS: 548,435 41,829 548,435 1,983 2,051 676 409 - 39.5 East Lyme 99,181 7,691 676 409 - 39.5 East Lyme 99,181 7,691 676 409 11,266 + 69.9 Montville 95,013 4,284 217 301 + 42.8 Lisbon 18,047 675 1,566 188 166 - 11.7 Sprague 17,756 814 1,406 747 - 46.9 Stonington 104,062 15,375	5,765       2,918       - 49.4       Groton       214,069       14,428         3,801       4,349       + 14.4       New London       134,455       12,362         4,167       4,689       + 12.5       Norwich       134,455       12,362         13,733       11,956       - 12.9       URBAN TOTALS:       548,435       41,829         55       380       307       - 19.2       Colchester       50,033       2,051         676       409       - 39.5       East Lyme       99,181       7,691         597       787       + 31.8       Griswold       44,835       1,983         564       564       564       60,033       2,051       675         152       1,266       + 42.8       Lisbon       18,047       675         745       1,266       + 69.9       Montville       95,013       4,284         217       + 42.8       Lisbon       18,047       675         745       1,266       + 69.9       Montville       95,013       4,284         217       + 33.0       16       - 11.7       5prague       17,756       814         1,406       747       - 46.9       5tonington <td>5,765       2,918       - 49.4       Groton       214,069       14,428         3,801       4,349       + 14.4       New London       134,455       12,362         4,167       4,689       + 12.5       Norwich       199,911       15,039         13,733       11,956       - 12.9       URBAN TOTALS:       548,435       41,829         13,733       11,956       - 12.9       Colchester       50,033       2,051         676       409       - 39.5       East Lyme       99,181       7,691         597       787       + 31.8       Griswold       44,835       1,983         564       564       564       64,902       4,330         152       277       + 42.8       Lisbon       18,047       675         745       1,266       + 69.9       Montville       95,013       4,284         217       + 42.8       Lisbon       18,047       675         1406       747       - 46.9       Stronington       104,062       15,375         977       906       - 7.3       SUBURBAN TOTALS:       667,808       49,039</td> <td>5,765       2,918       - 49.4       Groton       214,069       14,428         3,801       4,349       + 14.4       New London       134,455       12,362         4,167       4,689       + 12.5       Norwich       199,911       15,039         13,733       11,956       - 12.9       URBAN TOTALS:       548,435       41,829         13,733       11,956       - 12.9       URBAN TOTALS:       548,435       41,829         576       409       - 39.5       East Lyme       99,181       7,691         676       409       - 39.5       East Lyme       99,181       7,691         597       787       + 31.8       Griswold       44,835       1,933         564       564       0       Lisbon       18,047       675         745       1,266       + 69.9       Montville       95,013       4,284         217       + 42.8       Lisbon       26,501       1,566         18       166       - 11.7       Spraque       17,756       814         217       46.9       Storington       104,062       15,375         977       906       - 7.3       Suburban Totals:       667,808       49,039</td> <td>9,765 2,918 - 49.4 Groton 114,428 14,428   4,167 4,689 + 114.4 New London 114,455 12,362   4,167 4,689 + 12.5 Norwich 199,911 15,039   113,733 11,956 - 12.9 URBAN TOTALS: 548,435 41,829   5,807 307 - 19.2 Colchester 50,033 2,051   564 6,69 6,730 6,730 6,75   152 217 + 42.8 Lisbon 18,047 6,75   11,266 + 69.9 Nortville 95,013 4,284   217 46.9 Nortville 95,013 4,284   218 166 - 11.7 Sprague 17,756 814   11,406 747 - 46.9 Stonington 104,062 15,375   977 906 - 7.3 Naterford 117,928 10,270   5,902 5,670 - 3.9 SubURBAN TOTALS: 667,808 49,039   8005 - 7.3 RUBAL TOWNS: 12,769 716</td> <td>5,765 2,918 - 49.4 Groton 214,069 14,428 4,167 4,189 4</td> <td>5,765 2,918 - 49.4 Groton 214,069 14,428 4,167 4,168</td> <td>5,765         2,918         - 49.4         Groton         214,069         14,428           3,801         4,349         + 14.4         Norwich         134,455         12,362           4,167         4,689         + 12.5         Norwich         199,911         15,039           13,733         11,956         - 12.9         URBMN TOTALS:         548,435         41,829           380         307         - 19.2         Colchester         50,033         2,051           676         409         - 39.5         East Lyme         99,181         7,691           597         787         + 31.8         Griswold         44,835         1,983           152         217         + 42.8         Lisbon         14,835         1,983           145         1,266         + 69.9         Montville         94,902         4,330           175         46.9         Montville         94,902         4,334           18         1,266         + 69.9         Montville         94,002         4,334           18         1,266         + 69.9         Montville         94,002         1,366           18         1,406         1,77         - 46.9         Stonington         &lt;</td> <td>  1,765   2,918   - 49.4   Groton   214,069   14,428   4,349   4,349   4,11.4   New London   134,455   12,362   12,362   4,187   11,956   - 12.9   UNRBAN TOTALS.   548,435   12,362   1,933   11,956   - 12.9   UNRBAN TOTALS.   548,435   1,933   1,933   2,051   1,626   409   - 39.5   East Lyme   99,181   7,691   7,691   1,526   4,330   1,526   4,330   1,526   4,330   1,526   4,330   1,526   4,330   1,526   4,330   1,526   4,330   4,284   1,266   1,566   1,566   1,566   1,566   1,406   1,406   1,406   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1</td> <td>  13,733</td>	5,765       2,918       - 49.4       Groton       214,069       14,428         3,801       4,349       + 14.4       New London       134,455       12,362         4,167       4,689       + 12.5       Norwich       199,911       15,039         13,733       11,956       - 12.9       URBAN TOTALS:       548,435       41,829         13,733       11,956       - 12.9       Colchester       50,033       2,051         676       409       - 39.5       East Lyme       99,181       7,691         597       787       + 31.8       Griswold       44,835       1,983         564       564       564       64,902       4,330         152       277       + 42.8       Lisbon       18,047       675         745       1,266       + 69.9       Montville       95,013       4,284         217       + 42.8       Lisbon       18,047       675         1406       747       - 46.9       Stronington       104,062       15,375         977       906       - 7.3       SUBURBAN TOTALS:       667,808       49,039	5,765       2,918       - 49.4       Groton       214,069       14,428         3,801       4,349       + 14.4       New London       134,455       12,362         4,167       4,689       + 12.5       Norwich       199,911       15,039         13,733       11,956       - 12.9       URBAN TOTALS:       548,435       41,829         13,733       11,956       - 12.9       URBAN TOTALS:       548,435       41,829         576       409       - 39.5       East Lyme       99,181       7,691         676       409       - 39.5       East Lyme       99,181       7,691         597       787       + 31.8       Griswold       44,835       1,933         564       564       0       Lisbon       18,047       675         745       1,266       + 69.9       Montville       95,013       4,284         217       + 42.8       Lisbon       26,501       1,566         18       166       - 11.7       Spraque       17,756       814         217       46.9       Storington       104,062       15,375         977       906       - 7.3       Suburban Totals:       667,808       49,039	9,765 2,918 - 49.4 Groton 114,428 14,428   4,167 4,689 + 114.4 New London 114,455 12,362   4,167 4,689 + 12.5 Norwich 199,911 15,039   113,733 11,956 - 12.9 URBAN TOTALS: 548,435 41,829   5,807 307 - 19.2 Colchester 50,033 2,051   564 6,69 6,730 6,730 6,75   152 217 + 42.8 Lisbon 18,047 6,75   11,266 + 69.9 Nortville 95,013 4,284   217 46.9 Nortville 95,013 4,284   218 166 - 11.7 Sprague 17,756 814   11,406 747 - 46.9 Stonington 104,062 15,375   977 906 - 7.3 Naterford 117,928 10,270   5,902 5,670 - 3.9 SubURBAN TOTALS: 667,808 49,039   8005 - 7.3 RUBAL TOWNS: 12,769 716	5,765 2,918 - 49.4 Groton 214,069 14,428 4,167 4,189 4	5,765 2,918 - 49.4 Groton 214,069 14,428 4,167 4,168	5,765         2,918         - 49.4         Groton         214,069         14,428           3,801         4,349         + 14.4         Norwich         134,455         12,362           4,167         4,689         + 12.5         Norwich         199,911         15,039           13,733         11,956         - 12.9         URBMN TOTALS:         548,435         41,829           380         307         - 19.2         Colchester         50,033         2,051           676         409         - 39.5         East Lyme         99,181         7,691           597         787         + 31.8         Griswold         44,835         1,983           152         217         + 42.8         Lisbon         14,835         1,983           145         1,266         + 69.9         Montville         94,902         4,330           175         46.9         Montville         94,902         4,334           18         1,266         + 69.9         Montville         94,002         4,334           18         1,266         + 69.9         Montville         94,002         1,366           18         1,406         1,77         - 46.9         Stonington         <	1,765   2,918   - 49.4   Groton   214,069   14,428   4,349   4,349   4,11.4   New London   134,455   12,362   12,362   4,187   11,956   - 12.9   UNRBAN TOTALS.   548,435   12,362   1,933   11,956   - 12.9   UNRBAN TOTALS.   548,435   1,933   1,933   2,051   1,626   409   - 39.5   East Lyme   99,181   7,691   7,691   1,526   4,330   1,526   4,330   1,526   4,330   1,526   4,330   1,526   4,330   1,526   4,330   1,526   4,330   4,284   1,266   1,566   1,566   1,566   1,566   1,406   1,406   1,406   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1,406   1,40   1	13,733

171,616 249,868

10,554 13,694 38,374

675,823

54,189 117,442

> 3,147 6,760 1,269 5,247 1,590 1,463 6,890 8,558

885 343 89 519 204

108,388 21,053 30,459 21,240 134,870 144,762 797,841

42,633

4,066

109,372

32,178

1,730

816

54 30

18,573 10,791 199,88

523 495

54

85,210 1,562,325

12,471

4,203

352

14,835 12,284

254,339

1,443 2,839 3,771 8,053

Total

All Other

Public Assistance

1970 Census of Population and Summary Tape File 3A, 1980 Census of Population and Housing, Bureau of the Census. SOURCES:

SOURCE: Summary Tape File 3A, 1980 Census of Population, Bureau of the Census.

The exact causes of this drop in Groton are not clear, but they appear to be related to the town's high concentration of military personnel and their dependents.

The greatest concentration of low income population in 1979 was in the three urban towns. They collectively accounted for about two-thirds of the region's poverty population. These same towns, Groton, New London and Norwich, together contained less than half of the region's total population. New London in 1979 had the region's highest concentration of low income population. Nearly 17% of the city's residents had incomes below the poverty level. This was twice the level of concentration for the region as a whole and for Connecticut. In the case of both New London and Norwich, the percentages of their populations below the poverty level increased from 1969 to 1979. Clearly, poverty, as measured by the number of individuals affected and their relative concentration in the population, is an increasing urban problem.

Proportionately, the ten suburban towns as a group have few low income residents, about half the concentration of the urban communities in 1979. There are, however, striking differences between the wealthier and the poorer suburban towns. East Lyme had the lowest percentage of its population with incomes below the poverty level, only 3%. On the other hand, nearly 9% of Griswold's population was poor. But as a group, the suburban towns in 1979 housed less than one-third of the region's poor, while containing about half of its total population.

Southeastern Connecticut's five rural towns contained only modest numbers of low income persons in 1979 and relatively low concentrations of such persons. This is not to say that poverty is not a problem in rural towns. But the scale of the problem is considerably less than what exists in the region's urban communities.

### TOTAL AMOUNT AND TYPES OF INCOME

Sample data from the 1980 Census of Population permit one to estimate the amount and types of income received by the region's population in 1979. These are presented in Table 42.

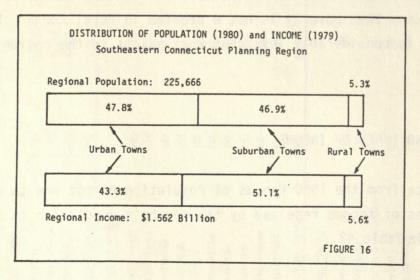
In 1979, the region's households collectively had an income estimated to be slightly more than \$1.5 billion. Figure 15 shows that more than 80% of this income was derived from employment earnings. This ratio compared quite closely to that of the state as a whole. Approximately 95% of the employment earnings for the region were wages or salaries.

		% Distribution of	ESTANGE CE TS	3 Theome by Ty	DE I	
most bys not make we	Earnings	Interest, Dividend or Net Rental Income	Social Security	Public Assistance	All Other	Total
State of Connecticut	83.2	7.4	4.8	0.8	3.8	100.0
Southeastern Connecticut Planning Region	82.8	6.1	4.9	0.8	5.4	100.0
Region's Urban Towns	81.1	6.2	5.8	1.2	5.7	100.0
Region's Suburban Towns	83.7	6.1	4.3	0.5	5.4	100.0
Region's Rural Towns	86.7	4.5	3.7	0.4	4.7	100.0

FIGURE 15

Other significant sources of income for the region were interest, dividends, and net rental income (6.1% of total income), and Social Security payments (4.9% of total income). Public Assistance payments accounted for less than 1% of the total regional income. The relative importance of these three broad categories of income in Southeastern Connecticut was very similar to that for the state as a whole.

Income is not distributed evenly among the region's eighteen municipalities. As Figure 16 shows, the three urban towns collectively were relatively poorer in 1979 than were their suburban or rural counterparts. With nearly 48% of the region's population, the urban towns accounted for only 43% of its estimated income.



Total Public Assistance Income (\$1,000) 2,839 1,443 3,771 8,053 885 519 175 154 Summary Tape File 3A, 1980 Census of Population, Bureau of the Census. 282 374 343 89 204 762 454 990 30 54 09 352 12,471 TABLE 44: HOUSEHOLDS WITH PUBLIC ASSISTANCE INCOME, 1979 SOUTHEASTERN CONNECTICUT PLANNING REGION Mean Public Assistance Income/Household (\$) 2,839 2,355 2,981 2,583 2,782 2,689 3,204 2,714 3,117 3,327 2,148 2,798 2,582 3,581 2,897 2,609 2,744 2,777 1,803 Number of Households 1,000 1,265 2,878 318 107 25 201 22 99 263 174 ,464 6 26 20 28 143 4,485 North Stonington SUBURBAN TOTALS: REGIONAL TOTALS: SUBURBAN TOWNS: URBAN TOTALS: URBAN TOWNS: New London Colchester RURAL TOTALS: Stonington RURAL TOWNS: East Lyme Montville Waterford Voluntown Griswold Franklin Sprague Groton Norwich Ledyard Preston Lisbon Bozrah Salem SOURCE: Total Social Security Income (\$1,000) 3,339 76,738 11,406 17,453 4,024 2,053 4,309 1,048 1,032 7,552 10,273 39,132 7,781 34,295 455 1,067 476 959 3,311 994 657 SOURCE: Summary Tape File 3A, 1980 Census of Population, Bureau of the Census. TABLE 43: HOUSEHOLDS WITH SOCIAL SECURITY INCOME, 1979 SOUTHEASTERN CONNECTICUT PLANNING REGION Mean Social Security Income/Household (\$) 4,345 4,013 1,173 4,439 3,446 3,713 4,414 4,005 4,264 3,935 4,337 4,388 3,960 4,167 4,102 4,827 4,351 4,207 3,821 4,166 4,261 4,191 Number of Households 2,848 4,093 ,095 103 116 136 18,311 2,361 9,302 926 278 1,794 1,721 8,232 256 492 224 304 North Stonington REGIONAL TOTALS: SUBURBAN TOTALS: SUBURBAN TOWNS: RURAL TOTALS: URBAN TOTALS URBAN TOWNS: Stonington New London Colchester RURAL TOWNS: Waterford Voluntown East Lyme Montville Griswold Franklin Preston Sprague Norwich Ledyard Groton Lisbon Bozrah Salem

The urban towns (Groton, New London, and Norwich) also differed from the suburban and rural towns in the sources of income for their residents. As Figure 15 shows, Social Security and Public Assistance payments were a significantly higher proportion of the total income in the urban towns, generating 7% of the income for these three towns collectively. In the case of both New London and Norwich, Social Security and Public Assistance combined exceeded 8% of their estimated total income for 1979.

Table 43 provides further information on Social Security recipients and their estimated incomes in 1979. About half of the households in Southeastern Connecticut receiving some income from Social Security payment were located in the urban towns. Nearly 40% of the regional total resided in Norwich or New London. Norwich had the largest number of such households.

The 1980 Census recorded nearly 4,500 households in Southeastern Connecticut that had received income from Public Assistance in 1979. Nearly two-thirds of these were located in the three urban towns, with Norwich having the largest number. (See Table 44.)

## VI. LOCAL GOVERNMENT FINANCES

The ability of local government to meet the facility and service needs of its population can have a profound effect on existing economic activities and it influences the decisions of businesses that may consider locating in Southeastern Connecticut. In addition, the balance between local expenditures and the local tax base affects the property tax burden that will be borne by economic activities.

The financial structure of local government rests for the most part on the value of property located within the borders of each local jurisdiction. This consists of two types of property: That which is subject to local property taxes and that which is exempt from such taxes. After all exemptions are deducted, the taxable value of property remaining is referred to as the "net grand list."

Table 45 presents comparative data on the net grand lists in Southeastern Connecticut's municipalities in FY 1972 and 1982. In 1982, this totaled over \$4 billion, or about \$19,200 for each person residing in the region. For the region as a whole, the net grand list grew by about 325% from 1972-82 in actual dollars. In constant 1972 dollars, the increase was about 80%.

The most important point with respect to the net grand lists is the fact that taxable property is not distributed uniformly from town to town in proportion to the number of residents. Figure 17 demonstrates this point dramatically. The relative strengths of the net grand lists, on which property taxes are assessed, varies widely. The median level for the region's municipalities was \$17,900 per capita in FY 1982, but New London's was nearly 50% lower at \$8,600, while Waterford was 355% higher at \$63,600. The range between the low and the high municipalities was \$55,000.

Further evidence of the differences in the relative wealth of local tax bases is shown on Figure 18 below. This illustration shows each municipality's percentage share of the total regional net grand list and total local governmental expenditures in FY 1982. The map shows that over one-quarter of the

New London

TABLE 45: NET GRAND LISTS, FY 1972 AND 1982 SOUTHEASTERN CONNECTICUT PLANNING REGION

XXXXXXX \$27,700 (XXXXX \$24,000

\$19,900 \$18,900

\$18,700

\$18,000 \$18,400

\$17,800

\$17,600 \$16,300 \$16,000 \$15,300 \$13,000 \$10,900 \$10,100 \$8,600

XXXXXXX XXXXXX XXXXX XXXXX XXXX

Stonington Griswold

Preston Norwich

\$17,900

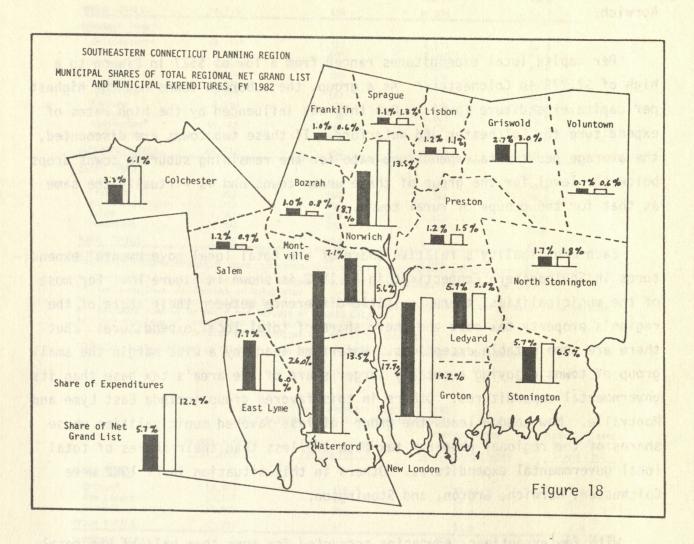
\$21,000

PER CAPITA NET GRAND LISTS, FY 1982 SOUTHEASTERN CONNECTICUT PLANNING REGION

(000*		Waterford XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	.1 Franklin XXXXXXXXXXXXXXX	.3 East Lyme XXXXXXXXXXXX	5.6 Salem XXXXXXXXXX	Borres Aveveve	7	Groton XXXXXXXXXX	Montville XXXXXXXXX		Ledyard XXXXXXXXX	.0 Colchester XXXXXXXXX	9		9 MEDIAN XXXXXXXX	30 30 30 30 30 30 30 30 30 30 30 30 30 3	No set C	7 North Stonington XXXXXXXXX	Voluntoum yyyyyyy		7 Sprague XXXXXXXX	
Per Capita Grand List (\$1,000)	Actual Actual 198 1972 1982 Constan		6	3.3 10.1 4	3.8 13.1 5.			8.3 24.0 10.	4.4 18.4 7.		6.5 18.7 8.			63.6	5.8 25.3 10.9	2.9 19.9 8.		5.2 17.8 7.		3.6 17.6 7.	4.7 20.1 8.	A 7 10.9 8.3
Grand List (\$1,000)	1 1982 In Constant 1972 \$			84 107,062 46 165,365	61 611,147				54 112,269						1,175,599			72 33,005				3 00 0 0 5
Grand List	Actual Actual			135,840 248,384 135,320 383,646	417,152 1,417,861	i Ai			52,638 260,464			16,322 48,96			567,023 2,727,391			20,031 76,572		5,404 29,46		1 030 700 A 200 2EE
a i c	120 120 130	URBAN TOWNS:	Groton	New London Norwich	URBAN TOTALS:	SUBURBAN TOWNS:	Colchester	East Lyme	Ledyard	Lisbon	Montville	Sprague	Stonington	Waterford	RURAL TOWNS:	Bozrah	Franklin	North Stonington .	Salem	Voluntown	RURAL TOTALS:	PECTONA! TOTALS.

Quadrennial Report of <u>Indebtedness</u>, <u>Receipts</u>, and <u>Expenditures of Municipalities</u>, 1972, Connecticut <u>Tax Commissioner</u>, 1975. <u>Grand Lists and Tax Rates of Connecticut Towns and Cities</u>, 1982-83, Institute of Public Service, University of Connecticut, 1983. SOURCES:

region's total taxable property value was located in Waterford, while New London's share was less than 6%. Groton also had a large share, nearly 18% of the regional total.



These differences reflect wide variation in the character of land use in the individual communities. New London, with a very limited property tax base, has a small geographic area and large amounts of tax exempt property. On the other hand, Waterford's generous tax base is due chiefly to the location of the Millstone Nuclear Generating Station in the town. Another factor is the elapsed time since the last municipal revaluation. Stonington's last revaluation was in 1974, thus its net grand list is somewhat deflated when compared to a town whose property has been revalued since 1980.

Local governmental expenditures in FY 1982 totaled nearly \$167 million, with education accounting for 58% of the total. Groton, including all local

governmental units within the town, had the largest expenditure, a little over \$32 million. The most dramatic expenditure was that of suburban Waterford, over \$22 million, which exceeded those of the urban centers of New London and Norwich.

Per capita local expenditures ranged from a low of \$527 in Lisbon to a high of \$1,273 in Colchester.\* As a group, the suburban towns had the highest per capita expenditure levels. But this was influenced by the high rates of expenditure for Colchester and Waterford. If these two towns are discounted, the average per capita expenditure rate for the remaining suburban towns drops below the level for the group of three urban towns and is virtually the same as that for the groups of rural towns.

Each municipality's relative share of the total local governmental expenditures in Southeastern Connecticut in FY 1982 is shown in Figure 18. For most of the municipalities, there is little difference between their share of the region's property tax base and their share of total local expenditures. But there are some notable exceptions. Waterford leads by a wide margin the small group of towns enjoying a notably larger share of the area's tax base than its governmental expenditures. Others in this favored group include East Lyme and Montville. New London leads the group of less favored municipalities whose shares of the regional property tax base are less than their shares of total local governmental expenditures. Others in this situation in FY 1982 were Colchester, Norwich, Groton, and Stonington.

With few exceptions, education accounted for more than half of the total governmental expenditures in each of the region's municipalities in FY 1982. In the rural towns, with more limited general governmental expenditures, education represented 70-75% of total expenditures. (See Table 46.) In the suburban towns, education expenditures averaged 60% of the total, but ranged broadly from 42% to nearly 80%. The average for the three urban towns was 53% of total expenditures attributable to education. As other governmental services increase with population size, education generally represents a smaller share of the total local expenditures. But it still is the largest single area of expenditure.

<sup>\*</sup> If a sewer construction encumbrance of \$2,112,945 for the Borough of Colchester is excluded, Waterford's per capita expenditure of \$1,253 would be the region's highest.

#### TABLE 46: MUNICIPAL EXPENDITURES, FY 1982 SOUTHEASTERN CONNECTICUT PLANNING REGION

	Total Expenditures (\$1,000)	Total Expenditures Per Capita (\$)	Education Expenditures (\$1,000)	Education As % Of Total Expenditures
URBAN TOWNS:				a news trop o
Groton* New London Norwich	32,007 20,324 22,407	769 705 589	17,122 9,208 13,494	53.5 45.3 60.2
URBAN TOTALS:	74,738	689	39,824	53.3
SUBURBAN TOWNS:				
Colchester** East Lyme Griswold# Ledyard## Lisbon Montville Preston Sprague Stonington@ Waterford  SUBURBAN TOTALS:	10,174 <sup>+</sup> 9,913 4,968 9,734 1,776 9,420 2,530 2,224 10,763 22,529 84,031	1,273 690 540 688 527 567 535 738 661 1,253	4,277 7,340 3,079 7,630 1,291 7,433 1,789 1,002 6,658 10,544 51,043	42.0 74.0 62.0 78.4 72.7 78.9 70.7 45.1 61.9 46.8
RURAL TOWNS:				The state of the s
Bozrah Franklin North Stonington Salem Voluntown	1,334 967 3,023 1,581 900	619 590 701 630 537	1,013 744 2,237 1,123 664	75.9 76.9 74.0 71.0 73.8
RURAL TOTALS:	7,805	635	5,781	74.1
REGIONAL TOTALS:	166,574	729	96,648	58.0

SOURCES: Municipal audits filed with the Connecticut Office of Policy and Management.

TABLE 47: LOCAL PROPERTY TAXES, FY 1982

	SOUTHE	ASTERN CONNECTICUT PLANN	NING REGION	
	Property Taxes(\$1,000)	Property Taxes Per Capita (\$)	Property Taxes As % Of Total Expenditures	Property Taxes As % Of Net Grand List
URBAN TOWNS:				A STATE OF THE STA
Groton* New London Norwich	17,447 11,167 11,621	419 387 305	54.5 54.9 51.9	2.2 4.5 3.0
URBAN TOTALS: SUBURBAN TOWNS:	40,235	371	53.8	2.8
Colchester** East Lyme Griswold* Ledyard** Lisbon Montville Preston Sprague Stonington# Waterford SUBURBAN TOTALS:	3,106 7,520 2,319 5,964 870 5,561 1,516 800 8,667 19,108 55,431	389 523 252 421 258 335 321 266 533 1,063	30.5 75.9 46.7 61.3 49.0 59.0 59.9 36.0 80.5 84.8	2.2 2.2 1.9 2.3 1.6 1.8 2.9 1.6 3.5 1.7
RURAL TOWNS:	Total and 198		K KUN HENRICH DE S	1,40(1)(4)
Bozrah Franklin North Stonington Salem Voluntown	740 883 1,853 1,304 444	343 538 430 519 265	55.5 91.3 61.3 82.5 49.3	1.7 1.9 2.4 2.5 1.5
RURAL TOTALS:	5,224	425	66.9	2.1
REGIONAL TOTALS:	100,890	441	60.6	2.3
* 11 -				

SOURCES: Municipal audits filed with the Connecticut Office of Policy and Management.

<sup>\*</sup> Includes Town and City of Groton, Groton Long Point Association, and five fire districts.

\*\* Includes Town and Borough of Colchester

+ Includes encumbrance of \$2,112,945 for sewer construction contracts for the Borough of Colchester.

Includes Town of Griswold and Borough of Jewett City.

Includes Town of Ledyard and Gales Ferry Fire District.

Includes Town and Borough of Stonington and six fire districts.

Includes Town and City of Groton, Groton Long Point Association and five fire districts. Includes Town and Borough of Colchester.
Includes Town of Griswold and Borough of Jewett City.
Includes Town of Ledyard and Gales Ferry Fire District.
Includes Town and Borough of Stonington and six fire districts.

In FY 1982, local property taxes levied within Southeastern Connecticut totaled a bit over \$100 million. By far the greatest amount of property taxes raised was in Waterford, over \$19 million. Waterford was followed by Groton, Norwich, and New London.

The per capita amount of property taxes ranged from \$252 in Griswold to a staggering \$1,063 in Waterford. This was a range of more than 300%. The very high figure for Waterford reflects the town's generous property tax base discussed above. As a group, the rural towns had relatively high per capita property tax levies. This is influenced by their more limited tax bases and the fact that they generally receive less state and/or federal financial support than do the more urban towns.

How dependent communities are on meeting their expenditures through property taxes varies considerably. (See Table 47.) In general, the group of urban towns in FY 1982 was less dependent on property taxes than the suburban or rural towns. Property taxes produced about 54% of the revenues needed to meet expenditures in the urban towns. For the group of suburban towns and the group of rural towns, property taxes produced an average of about 66% of the revenue.

The relative burden of property taxes in the region's municipalities can be seen from the last column on Table 47. This shows the 1982 local property levy as a percentage of the net grand list in each municipality in FY 1982. The higher the percentage, the greater the pressure on the tax base. New London, with a limited tax base and high total expenditures, raised property taxes that amounted to 4.5% of its net grand list. On the other hand, Waterford, with a very large tax base and high total and per capita expenditures, raised property taxes equivalent to only 1.7% of its tax base. Other towns that evidenced notably more pressure on their tax bases than the regional average (2.3%) were: Stonington, (3.5%); Norwich, (3.0%); and Preston (2.9%).

The effective property tax burden on an average homeowner can be estimated, at least in a theoretical comparison. Such a comparison is made more difficult by the fact that not all municipal property revaluations were conducted at the same time. We have used the following procedure to provide an equalized

assessed value of a model home in each community.

- 1. The model was based on the median value of owner-occupied homes in the entire region. This value rose from \$17,500 in 1970 to \$53,900 in 1980. The annual increase averaged \$3,640.
- 2. To provide an equalized value for a house, the number of years after 1970 that the revaluation took place was first established. That number was then multiplied by the increase in median value per year (\$3,640), and the product was added to the 1970 base value (\$17,500). Thus, for Stonington, whose last revaluation was in 1974, the median true value was determined by the following calculation:

$$(4 \times \$3,640) + \$17,500 = \$32,060$$

3. The assessed value, as opposed to median true value, was set at 70%, which is the rate used by all of the region's municipalities. In our Stonington example, this produces the following estimated assessed value:

$$$32,060 \times .7 = $22,442$$

4. The FY 1983 tax rates in each town were then applied to the equalized assessed value of the model home to estimate the tax burden the model home would theoretically experience in each town.

The results of this analysis are shown in Figure 19. It should be kept in mind that the figures shown are not actual property tax levies but are estimates of tax burdens on a model home whose assessed value has been equalized for all towns. This, in theory, leaves the tax rate as the only variable affecting the total tax to be paid.

The results of the analysis generally are consistent with other indicators discussed earlier. New London is identified as the municipality with the heaviest local property tax burden, followed by Norwich, Ledyard and East Lyme. At the low end of the range is Lisbon, followed by Waterford, Voluntown and Franklin. Groton was the only urban town to fall below the median point in the range. The difference between the low and the high property tax levels is

TABLE 48: LONG-TERM DEBT, FY 1982 SOUTHEASTERN CONNECTICUT PLANNING REGION

Long-Term Debt As % Of Net Grand List		2.1	2.6	2.4	2.2		3.0	0.8	1.3	0.3	0.3	0.5	0.7	0.1	2.1	1.9	1.4		0.1	0.3	0.1	0.8	0.2	0.3	1.6	STRUCTURE OF THE PROPERTY OF T
Per Capita Long-Term Debt, \$		388	221	241	292		536	203	168	54	44	93	73	10	316	1,205	357		21	93	26	164	38	64	310	
Long-Term Debt (\$1,000)		16,170	6,370	9,190	31,730	51	4,286	2,915	1,550	765	149	1,550	345	30	5,143	21,660	38,393		45	153	113	413	64	788	70,911	
	URBAN TOWNS:	Groton*	New London	Norwich	URBAN TOTALS:	SUBURBAN TOWNS:	Colchester**	East Lyme	Griswold+	Ledyard++	Lisbon	Montville	Preston	Sprague	Stonington#	Waterford	SUBURBAN TOTALS:	RURAL TOWNS:	Bozrah	Franklin	North Stonington	Salem	Voluntown	RURAL TOTALS:	REGIONAL TOTALS:	
ESTIMATED PROPERTY TAX ON HOME WITH EQUALIZED ASSESSED VALUE, FY 1983 SOUTHESTERN CONNECTICUT PLANNING REGION			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	XXXXXXXXXXXX \$1,185	XXXXXXXXXXX \$1,092	730 t3 × ××××××××××××××××××××××××××××××××		XXXXXXXXXXX \$1,056	XXXXXXXXX \$1,007	XXXXXXXX ¢047		XXXXXXXXX \$888	XXXXXXXXX \$865			XXXXXXXX \$848		XXXXXXXX \$831		XXXXXXX \$830	XXXXXXXX \$808	XXXXXXX \$728		\$7/\$ \$/\$2	XXXXXXX \$721	XXXXXXX \$717
ESTIMATED PROPERTY TAX ON HC SOUTHESTERN C		New London		Norwich	Ledyard	East I ville		North Stonington	Salem	Colchester		Preston	Griswold			MEDIAN		Groton			Stonington )	Bozrah		MOIICVIIIE	Franklin X	Voluntown X

\$650

\$644

Includes Town and City of Groton, Groton Long Point Association, and five fire districts.

Includes Town and Borough of Colchester.

Includes Town of Griswold and Borough of Jewett City.

Includes Town of Ledyard and Gales Ferry Fire District.

Includes Town and Borough of Stonington and six fire districts. # FIGURE 19

SOURCES:

Municipal audits filed with the Connecticut Office of Policy and Management, FY 1982.

XXXXXXX XXXXXXX XXXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXX XXXXXX

Groton Sprague Stonington Bozrah Montville Franklin Voluntown Waterford Lisbon 180%, reflecting relative differences in municipal service burdens in relation to the value of taxable property. This is especially noticeable for Waterford, which had very high expenditures for its size but a very low property tax burden, and New London, which had moderately high expenditures but a very high property tax burden.

Another point of interest is the long-term debt incurred by the region's towns and cities. In FY 1982, this totaled nearly \$71 million. Waterford had the largest debt of any of the region's communities, over \$21 million. The collective debt of the various governmental units in Groton totaled about \$16 million. The smaller towns, not unexpectedly, had lower amounts of debt. At \$30,000, Sprague had the lowest long-term debt in the region.

Overall, the total local long-term debt in FY 1982 amounted to \$310 per capita for the entire region. On a local basis, this ranged from \$10 per capita in Sprague to \$1,205 in Waterford. The more urban towns generally had considerably heavier per capita long-term debt obligations than the suburban or rural towns.

This last point is evidenced in the comparison of long-term debt as a percentage of local net grand list. (See the last column of Table 48.) Six municipalities were above the regional average of 1.6%. These were: Colchester, (3.0%); New London, (2.6%); Norwich, (2.4%); Groton, (2.1%), Stonington, (2.1%); and Waterford, (1.9%). In contrast, many of the suburban and rural towns had debt levels accounting for less than 1% of their tax bases. It should be noted that none of Southeastern Connecticut's municipalities is close to its authorized debt limit.

#### VII. CONCLUSIONS

During the decade of the 1970's and the early 1980's, Southeastern Connecticut's economy performed well. From 1970-80, non-agricultural civilian jobs available in the region increased by 25%. This was ten times the rate of population growth. Throughout most of this period, the region's unemployment rate was below that of the State of Connecticut and that of the nation. And the national recession of the early 1980's had substantially less impact on Southeastern Connecticut than in most other industrialized areas of the country.

Southeastern Connecticut's economic strength was due primarily to continued high employment in defense activities. Employment in defense activities grew over the decade and continues to be strong at the time of this writing. About one-third of the region's total employment is concentrated on primary defense activities. If secondary defense activities and indirect defense linkages are considered, Southeastern Connecticut's defense dependence is estimated to include at least half of its total work force. Ironically, this sector of the region's economy was largely responsible for the area's economic health since 1970 but also is its greatest potential long-term economic problem.

Specific findings of this study are summarized below.

- In 1980, Southeastern Connecticut had a total labor force of 113,163, of whom 12,800 were military personnel. About 42,000 women participated in the region's labor force.
- Southeastern Connecticut's labor force is highly skilled, with a notable concentration of workers with precision production, craft, and repair occupations.
- 3. About 90% of the region's employed workers in 1980 had jobs within Southeastern Connecticut. And the region is a net importer of workers.
- 4. Jobs available within Southeastern Connecticut increased by more than 25% from 1970-80, while the region's population grew by only 2.5%. Groton had the largest growth in jobs of the region's eighteen municipalities.
- 5. Since 1980, Southeastern Connecticut has enjoyed an unemployment rate below that of Connecticut and the nation. In June of 1983, the region's unemployment rate was 5.1%.
- 6. Manufacturing industries employ about 34% of the region's civilian labor force. This is the single largest employment sector in the region's economy.
- 7. Primary defense activities employ about one-third of the region's total employment. This is about the same degree of dependence as existed a decade earlier. Defense activities are by far the most important source of employment in the region's economy.
- 8. Retail trade still is dominated by the region's urban towns. But their relative dominance slipped over the past decade. A major shift in retail trade patterns is expected following the opening of Crystal Mall in suburban Waterford in the fall of 1984.

- 9. Tourism is an important non-defense element of the region's economy, with potential for growth.
- 10. Agriculture and fishing employ only modest numbers of workers. Poultry products accounted for about half the \$68 million in total agricultural sales in New London County in 1982. The total value of fish landed in the county in 1982 was \$3.7 million, 53% of which was finfish.
- 11. Median family income in Southeastern Connecticut in 1979 was \$20,342, compared to a state-wide median of \$23,151.
- 12. In 1979, 18,233 persons (8% of the region's population) were living on incomes below the federal definition of poverty. Two-thirds of these people resided in the three urban towns of Groton, New London, and Norwich.
- 13. The total income for the region's residents in 1979 was estimated to be more than \$1.5 billion. More than 80% of this was from employment earnings.
- 14. Public financial resources and service needs are not distributed proportionately among the region's municipalities. Both New London and Norwich have substantially more limited property tax bases in relation to their populations than do the other municipalities. On the other hand, Waterford's property tax base far exceeds that of any other community in Southeastern Connecticut.



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